# A Transfer Learning Approach to Breast Cancer Histological Classification Using Deep Learning

A Project Report submitted in partial fulfilment of the requirements for the degree of Master of Computer Application

by

### Swararina Lodh

Registration No. 18111 of 2014-15 Roll No. 1723010001

Under the Supervision of

Dr. Swanirbhar Majumder



Department of Information Technology

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Suryamaninagar, Tripura, India - 799022

June, 2020



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#### Certificate

This is to certify that the thesis entitled "A Transfer Learning Approach to Breast Cancer Histological Classification Using Deep Learning" submitted to Tripura University in the Department of Information Technology in partial fulfillment of the award of the degree of Master of Computer Application is a record of research work carried out by Swararina Lodh, Registration Number 18111 under my supervision and guidance.

All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

Signature of Supervisor (Dr. Swanirbhar Majumder) Head of the Department Department of Information Technology Tripura University Suryamaninagar, Tripura, India, 799022

# Smart Border Security System using Internet of Things

A project report submitted in partial fulfilment of the requirements for the degree

of

Master of Computer Application

by

#### Madhurima Bhattacharya

Registration No. 17928 of 2014-15 Roll No. 1723010002 Under the Supervision

and

Guidance of

#### Dr. Alak Roy

Assistant Professor, Dept. of Information Technology, Tripura University



Department of Information Technology

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#### Certificate

This is to certify that the project entitled "Smart Border Security System using Internet of Things" submitted to Tripura University in the Department of Information Technology in partial fulfillment of the award of the degree of Master of Computer Application is a record of research work carried out by Madhurima Bhattacharya. Registration Number 17928 of 2014-15. Roll No. 1723010002 under my supervision and guidance.

All helps received by her from various sources have been duly acknowledged. No part of this project has been submitted elsewhere for award of any other degree.

Signature of Superviso

(Dr. Alak Roy) Assistant Professor

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# A comprehensive study on QCA design approach and it challenges

A thesis submitted in partial fulfilment of the requirements for the degree of Master of Computer Application

by

#### Subrata Ghosh

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Roll no. 1723010004



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June, 2020



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#### Certificate

This is to certify that the thesis entitled "A comprehensive study on QCA design approach and it challenges" submitted to Tripura University in the Department of Information Technology in partial fulfillment of the award of the degree of Master of Computer Application is a record of research work carried out by Subrata Ghosh, Registration Number 03226 of 2013-2014 under my supervision and guidance.

All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

Signature of Supervisor (Jayanta Pal) Assistant Professor Department of Information Technology Tripura University Suryamaninagar, Tripura, India, 799022

# Predicting Mortality for ICU Patients Using Cloud Computing

A project report submitted in partial fulfilment of the requirements for the degree of Master of Computer Application

by

#### Sucheta Ningombam

Registration No. 17758 of 2013-14 Roll No. 1723010006

Under the Supervision of

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Associate Professor, Dept. of IT



Department of Information Technology

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June 22nd, 2020



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#### Certificate

Certified that the thesis entitled "Predicting Mortality for ICU Patients using Cloud Computing" submitted by Sucheta Ningombam, Registration Number 17758 of 2013-14, Roll No. 1723010006, to Tripura University in the Department of Information Technology is a record of research work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

(Dr. Swanirbhar Majumder)
Associate Professor &
Head of the Department
Department of Information Technology
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# Study on Automated Early Detection of Sepsis using Machine Learning

A thesis submitted in partial fulfilment of the requirements for the degree of

Master of Computer Application

by

### Ranadhir Debnath

Registration No. 19283 of 2014-15 Roll No. 1723010007



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June, 2020



Suryamaninagar, West Tripura, India, 799022.

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All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

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## Synthesis of Logic Circuit in QCA Incorporating Regular Clocking Scheme

A thesis submitted in partial fulfilment of the requirements for the degree of

Master of Computer Application

by

#### Jyotirmoy Sil Sharma

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June, 2020



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This is to certify that the thesis entitled "Synthesis of Logic Circuit in QCA Incorporating Regular Clocking Scheme" submitted to Tripura University in the Department of Information Technology in partial fulfillment of the award of the degree of Master of Computer Application is a record of research work carried out by Jyotirmoy Sil Sharma, Registration Number 18108 of 2014-2015 under my supervision and guidance.

All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

Signature of Supervisor
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# Security in Cloud Platform using BaaS Protocol

A thesis submitted in partial fulfilment of the requirements for the degree of

Master of Computer Application

by

# Sonia Paul

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May, 2019



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#### Certificate

This is to certify that the thesis entitled "Security in Cloud Platform using BaaS Protocol" submitted to Tripura University in the Department of Information Technology in partial fulfillment of the award of the degree of Master of Computer Application is a record of research work carried out by Sonia Paul, Registration Number 007871 of 2010-11 under my supervision and guidance.

All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

Signature of Supervisor (Sri. Swarup Nandi)

Lecturer

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# Android Application for Public Transport Tracking

A thesis submitted in partial fulfilment of the requirements for the degree of

Master of Computer Application

by

# Ayan Bhattacharjee

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Under the Supervision and Guidance of

## Radhey Shyam

Scientist-B, NIC Agartala

and

## Alak Roy

Assistant Professor, Department of IT
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Department of Information Technology
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All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

Alakkon 06/05/2018 Signature of Project Supervisor

(Mr. Alak Roy)

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# A study of temperature stability and power dissipation on combinational logic circuits in Quantum Dot Cellular Automata

A thesis submitted in partial fulfilment of the requirements for the degree of

Master of Computer Application

by

# Shiboprosad Bhattacharjee

Registration No. 016282 of 2016-17

Under the Supervision and Guidance of

# Jayanta Pal

Assistant Professor, Decertment of IT Tripura University, Sugamaninagar



Department of Information Technology
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Suryamaninagar, Tripura, India - 799022 May, 2019



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This is to certify that the thesis entitled "A study of temperature stability and power dissipation on combinational logic circuits in Quantum Dot Cellular Automata" submitted to Tripura University in the Department of Information Technology in partial fulfillment of the award of the degree of Master of Computer Application is a record of research work carried out by Shiboprosad Bhattacharjee, Registration Number 016282 of 2016-17 under my supervision and guidance.

All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

Signature of Project Coordinator

(Mr. Jayanata Pal)

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# Cloud based Immediate attention requirement for ICU patient

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Computer Application

by

# Madhu Chanda Roy

Registration No. 05020 of 2012-2013

Under the Supervision and Guidance of by

# Dr. Swanirbhar Majumder

Associate Professor, Department of IT



Department of Information Technology

Tripura University

Suryamaninagar, Tripura, India - 799022 May, 2019



Suryamaninagar, West Tripura, India, 799022.

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This is to certify that the thesis entitled "Cloud based Immediate attention requirement for ICU patient" submitted to Tripura University in the Department of Information Technology in partial fulfillment of the award of the degree of Master of Computer Application is a record of research work carried out by Madhu Chanda Roy, Registration Number 05020 Of 2012-2013 under my supervision and guidance.

All helps received by him from various sources have been duly acknowledged. No part of this thesis has been submitted elsewhere for award of any other degree.

Signature of Supervisor
(Dr. Swanirbhar Majumder)
Associate Professor
Department of Information Technology
Tripura University
Suryamaninagar, Tripura, India, 799022

# Natural Language for Local (Hrangkhawl) Dialect

Project report submitted in partial fulfilment of the requirements for the award of the degree of

#### **Master in Computer Application**

Submitted By

# Theodore Raphael Hrangkhawl MCA Roll No. 1501190009

Under the Supervision and Guidance of

Dr. Swanirbhar Majumder

Associate Professor, Department of Information Technology



#### DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY
(A Central University)
Suryamaninagar, Tripura, India - 799022

June, 2018

#### UNDERTAKING

I declare that the work which is being presented in this project report entitled "Natural Language Processing for local (Hrangkhawl) dialect", submitted to the Information Technology Department, Tripura University, for the award of the degree of Master in Computer Application, is an authentic record of my own work carried out under the supervision and guidance of **Dr. Swanirbhar Majumder**. I have not plagiarized or submitted the same work for the award of any other degree. In case this undertaking is found incorrect, I accept that my degree may be unconditionally withdrawn

June, 2018 Agartala The odore Rophael Hrangkhawl

Mr. Theodore Raphael Hrangkhawl

## CERTIFICATE OF APPROVAL

Certified that the work contained in the project report entitled "Natural Language processing for local (Hrangkhawl) dialect", by Mr. Theodore Raphael Hrangkhawl, Registration Number 014244 of 2012-13 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Dr. Swanirbhar Majumder

Project Supervisor and Head

Associate Professor

Department of Information Technology

Tripura University

Mr. Jayanta Pal

Sec. 806/18

**Project Coordinator** 

**Assistant Professor** 

Department of Information Technology

Tripura University

#### **CERTIFICATE**

This is to certify that the project "Natural Language processing for local (Hrangkhawl) dialect" of project report submitted by Mr. Theodore Raphael Hrangkhawl, Registration No 014244 of: 2012-13 is approved for the award of Degree of Master of Computer Application and the project evaluation and viva-voce examination has been held on June 2018.

INTERNAL EXAMINER

EXTERNAL EXAMINER

# Wearable Devices Based on Internet of Things Promises for Person-Centered Healthcare

Master of Computer Application (MCA) 6th Semester

## **Master of Computer Application**

by

#### **SOUVIK NAG**

MCA1501190014

#### SRI SWARAP NANDI

Assistant Professor, Department of IT



#### **Department of Information Technology**

TRIPURA UNIVERSITY
(A Central University)
Suryamaninagar, Tripura, India - 799022

September, 2018

#### UNDERTAKING

I declare that the work which is being presented in this project report entitled "Wearable Devices Based on Internet of Things", submitted to the Information Technology Department, Tripura University, for the award of the degree of Master of Computer Application, is an authentic record of my own work carried out under the supervision and guidance of Sri Swarup Nandi Lacturer, Department of IT TU. I have not plagiarized or submitted the same work for the award of any other degree. In case of this undertaking is found incorrect, I accept that my degree may be unconditionally withdrawn.

September 2018 Agartala Souvik Nag Souvik Nag

#### CERTIFICATE OF APPROVAL

Certified that the work contained in the project report entitled "Wearable Devices Based on Internet of Things Promises for Person-Centered Healthcare", by Souvik Nag, 007204 of 2011-2012 Roll no. 1501190014 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidanceand is worthy of consideration for the award of the degree of Master of ComputerApplication of the University.

Sri. Swarup Nandi (Project Supervisor) Lacturer

Department of Information Technology Tripura University Sri Jayanta Pal
(Project Coordinator)
Associate Professor
Department of Information Technology

Tripura University

Dr. Swanirbhar Majumdar (Head of the Department) Associate Professor Department of Information Technology

Department of Information Tech Tripura University

# Digitization of 1st Settlement Surveyed RORs

Project report submitted in partial fulfilment of the requirements for the award of the degree of

## **Master of Computer Application**

Submitted by
Arghyajita Deb
1501190010
&
Indra Rekha Debnath
1501190012

Under the Supervision and Guidance of
Sumanta Saha
(Lecturer)
Department of IT



Department of Information Technology TRIPURA UNIVERSITY (A Central University) Suryamaninagar, Tripura, India - 799022

June, 2018

# CERTIFICATE OF APPROVAL

Certified that the work contained in the project report entitled "Digitization of 1st Settlement Surveyed RORs", by Arghyajita Deb ,Registration Number 14900 of 2012-13&IndraRekhaDebnath, Registration Number 14899 of 2012-13 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under our supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

A26/6/18

Sumanta Saha
(Project Supervisor)
(Lecturer)
Department of IT
Tripura University

Ser 08/06/18

Jayanta Pal (Project Coordinator) Assistant Professor Department of IT Tripura University

Dr. Swanirbhar Majumder
(Head of the Department)
Associate Professor
Department of IT
Tripura University

# Personal Health Record (Based on online)

Project report submitted in partial fulfilment of the requirements for the award of the degree of

# **Master of Computer Application**

Submitted by
Suman Bhowmik
1501190018
&
Chayanika Deb
1501190016

Under the Supervision and Guidance of **Tandra Sarkar**Guest Lecturer, Department of IT



Department of Information Technology TRIPURA UNIVERSITY (A Central University) Suryamaninagar, Tripura, India - 799022

June, 2018

# CERTIFICATE OF APPROVAL

Certified that the work contained in the project report entitled "Personal Health Record (Based on Online)", by Suman Bhowmik, Registration Number 14220 of 2012-13 & Chyanika Deb, Registration Number 05001 of 2012-13 of Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under our supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Jan 7/09/18

Mrs. Tandra Sarkar
(Project Supervisor)
Guest Lecturer
Department of Information Technology
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Mr. Jayanta Pal (Project Coordinator) Assistant Professor

Department of Information Technology
Tripura University

Dr. Swanirbhar Majumder (Head of the Department) Associate Professor

Department of Information Technology Tripura University

# Logic Circuits using Quantum Dot Cellular Automata

Project report submitted in partial fulfilment of the requirements for the award of the degree of

# **Masters of Computer Application**

by

Santanu Paul (1501190013)

Under the Supervision and Guidance of

Mr. Jayanta Pal

Assistant Professor, Department of IT



# **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

# CERTIFICATE OF APPROVAL

Certified that the work contained in the project report entitled "Logic Circuits using Quantum Dot Cellular Automata", by Santanu Paul, Registration no. 15884 of 2012-13 to Tripura University, Suryamaninagar, India, is a record of bona-fide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Masters of Computer Application.

Jayanta Pal

( Project Coordinator & Guide )

**Assistant Professor** 

Department of Information Technology

Tripura University

Dr. Swanirbhar Majumder

Head of the Department

**Associate Professor** 

Department of Information Technology

Tripura University

# Dashboard for e-Jami

Project report submitted in partial fulfillment of the requirements for the award of degree of

# **Masters of Computer Applications**

by

Deepshikha Das 1501190004

Jayatri Debnath 1501190011

Under the Supervision and Guidance of

Alak Roy

Assistant Professor, Department of IT

SUPPLIES OF THE PARTY OF THE PA

# DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY
(A Central University)
SURYAMANINAGAR - 799022, TRIPURA

## CERTIFICATE OF APPROVAL

Certified that the work contained in the project report titled "Dashboard for e-Jami" by Deepshikha Das, Registration no. 010972 of 2011-12 and Jayatri Debnath, Registration No.15886 of 2012-13 to Tripura University, Suryamaninagar, India, is a record of bonafied project work carried out under supervision and guidance and is worthy of consideration for the award of the degree of Masters of Computer Application.

16/16/16

Alak Roy (Project Supervisor) Assistant Professor Department of IT Tripura University X 06 18

Jayanta Pal (Project Coordinator) Assistant Professor Department of IT Tripura University

Dr. Swanirbhar Majumder (Head of the Department) Associate Professor Department of IT Tripura University

# Online Health Care (Emergency Services)

Project report submitted in partial fulfillment of the requirement for the subject project & viva (INFT1201P)

# **Masters of Computer Applications**

by

Rakesh Majumder (1501190005)

Prasanta Pal

(1501190015)

Arpan Deb

(1501190017)

Under the Supervision and Guidance of

Internal Guide **Bhaskar Biswas**Guest Lecturer, Department of IT

External Guide
Nilkamal De Purkayastha
Programmer/SB,NIC, Agartala



# DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY

(A Central University)
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Certified that the work contained in the project report titled "Online Health Care (Emergency Services)" by Rakesh Majumder, Registration no. 011234 of 2010-11, Prasanta Pal, Registration No.14149 of 2011-12 and Arpan Deb, Registration no. 00824 of 2012-13 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under supervision and guidance and is worthy of consideration for the award of the degree of Masters of Computer Application.

4/6/18

Bhaskar Biswas
(Internal Project Supervisor)
Guest Lecturer
Department of IT
Tripura University

(260, 880,018

Jayanta Pal (Project Coordinator) Assistant Professor Department of IT Tripura University

Dr. Swanirbhar Majumder
Associate Professor
Head Of The Department
Department of IT

Department of IT Tripura University

# Employee Attendance and Payroll Management System

Project report submitted in partial fulfillment of the requirements for the award of the degree of

## **Master of Computer Application**

By

Dipanwita Debnath

MCA/F/06/19/14

Under the Supervision and Guidance of

Mr. Sumanta Saha

Lecturer, Department of IT



## Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

## CERTIFICATE

This is to certify that the project entitled "Employee Attendance and Payroll Management System" submitted by Dipanwita Debnath (MCA/F/06/19/14) is approved for the award of Degree of Master of Computer Application and the project evaluation and viva-voce examination has been held on

Date: June, 2017

\$ 50 andi 02/06/17

INTERNAL EXAMINER

( Jan 2 106/17

**EXTERNAL EXAMINER** 

## ONLINE REVENUE COLLECTION FOR HIGH COURT OF TRIPURA

Project Report submitted in partial fulfillment of the requirements for the award

of the degree of

Master of Computer Application

By

#### RIYA TRIPATHI

MCA/F/6/17/14

&

#### **PUJA BHATTACHARYYA**

MCA/F/6/13/14

Under the Supervision and Guidance of

Mr. BIMAL KANTI BISWAS

Scientist-D, NIC Agartala

&

#### Mr. SUMANTA SAHA

Lecturer, Department of IT



#### **Department of Information Technology**

#### TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "Online Revenue Collection For High Court Of Tripura", by Riya Tripathi Registration No-12926 & Puja Bhattacharyya Registration No-12928, of Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under our supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Sumanta Saha (Project Supervisor) Lecturer

Department of Information Technology Tripura University

Mr. Jayanta Pal (Project Coordinator) **Assistant Professor** Department of Information Technology

Tripura University

Deptt. of Information Technology. Tripura University.

Mr. Alak Roy

(Coordinator)

Assistant Professor

Department of Information Technology

# Web Design of Tripura Football Association

Project report submitted in partial fulfilment of the requirements for the award of the degree of

## **Master of Computer Application**

by

Mahasweta Roy (MCA/F/06/04/14)

Under the Supervision and Guidance of

Mrs. Tandra Sarkar

Guest Teacher, Department of IT



# Department of Information Technology TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

Certified that the work contained in the project report entitled "Web Design of Tripura Football Association", by Mahasweta Roy, Registration Number 18121 of 2014-2015 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mrs. Tandra Sarkar

(Project Supervisor)

Guest Teacher

Department of Information Technology

Tripura University

Mr. Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

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Mr. Alak Roy

(Coordinator, Department of IT)

Assistant Professor

Department of Information Technology

Football Association", by Mahasweta Roy, Registration Number 18121 of 2014-2015 to Tripura University. Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mrs. Tandra Sarkar

(Project Supervisor)

Guest Teacher

Department of Information Technology

Tripura University

Mr. Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Coordinator, Department of IT)

Assistant Professor

Department of Information Technology

## Accounts Software For AG (Audit) Tripura

Project report submitted in partial fulfilment of the requirements for the award of the degree of

## **Master of Computer Application**

by

Banashree Deb

MCA/F/6/05/14

Under the Supervision and Guidance of

Mrs. Tandra Sarkar

Guest Teacher, Department of IT, Tripura University



## Department of Information Technology

TRIPURA UNIVERSITY

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Certified that the work contained in the project report entitled "Accounts Software For AG (Audit) Tripura", by Banashree Deb, Registration Number 12974 of 2011-12 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mrs. Tandra Sarkar

Tandra Sankan aslit

(Project Supervisor)

Guest Teacher

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Tripura University

Mr. Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Coordinator of the Department)

Assistant Professor

Department of Information Technology

## Online Registration System for SCERT

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Moumita Debnath
MCA/F/6/18/14
and
Sreema Deb
MCA/F/6/16/14

Under the Supervision and Guidance of

Mrs. Tandra Sarkar

Department of IT



#### **Department of Information Technology**

Tripura University
(A Central University)
Suryamaninagar, Tripura, India -799022

### "CALCULATING WATER PH LEVEL BY SENSORED PH METER"

Thesis report submitted in partial fulfillment of the requirements for the award

### **Master of Computer Application**

by PINKI DEBNATH

Reg No: 18119 of 2014-15 Roll No: MCA/F/06/06/2014

Under the Supervision and Guidance of MR. SUMANTA SAHA Lecturer, Department of IT



Department of Information Technology

TRIPURA UNIVERSITY (A Central University)

Suryamaninagar, Tripura, India - 799022.

**JUNE 2017** 

Certified that the work contained in the project report entitled "CALCULATING WATER PH LEVEL BY SENSORED PH METER", by Pinki Debnath, Roll No MCA/F/06/06/2014 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Sumanta Saha (Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Ma Jaconto Pol

Mr. Jayanta Pal
(Project Coordinator)
Assistant Professor
Department of Information Technology
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Mr. Alak Roy
(Coordinator)
Assistant Professor
Department of Information Technology
Tripura University

#### TRIPURA STATE LEGAL SERVICES AUTHORITY

Project report submitted in partial fulfillment of the requirements for the award

Of the degree of

#### Master of Computer Application

by

#### SUBHASISH BHOWMIK

MCA/M/06/12/14

Under the Supervision and Guidance of

Mr. Sumanta Saha

Lecturer, Department of IT



#### Department of Information Technology

TRIPURA UNIVERSITY

( A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "Tripura State Legal Services Authority", by Subhasish Bhowmik, Registration Number 13059 of 2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project Work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Sumants Salagrafit

Sumanta Saha
(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Jayanta Pal
(Project Co-ordinator)
Assistant Professor
Department of Information Technology

Tripura University

Alak Roy (Co-ordinator)

Assistant Professor
Department of Information Technology

## Image Classification using CNN on Deep Learning

Project report submitted in partial fulfillment of the requirements

For the examination of the course

#### **Masters of Computer Applications**

by

#### Rimi Rani Paul (MCA/F/06/08/14)

Under the Supervision and Guidance of

Dr. Prodipto Das

Assistant Professor
Department of Computer Science
Assam University, Silchar

Dr. Abhishek Das

Assistant Professor
Department of IT
Tripura University, Agartala



## DEPARTMENT OF INFORMATION TECHNOLOGY TRIPURA UNIVERSITY

(A Central University)
SURYAMANINAGAR - 799022, TRIPURA

Certified that the work contained in the project report entitled "Image Classification using CNN on Deep Learning", by Rimi Rani Paul (Reg. no.:14240) of Tripura University, Suryamaninagar, India, is a record of bona fide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Assistant Professor

Department of Computer Science niversity, Silcher

Dr. Abhishek Das

(Project Co-Supervisor) Assistant Professor

Department of Information Technology Tripura University, Agartala

Jayanta Pal

(Project Coordinator) Assistant Professor Department of Information Technology Tripura University, Agartala

Alak Ropeptt, of Information Technology

(Coordinator of the Department) Assistant Professor

Department of Information Technology Tripura University, Agartala

### "Tutorialstutor" App based on Android

Project report submitted in partial fulfillment of the requirements of MCA  $6^{th}$  semester of the course

#### **Master of Computer Application**

By

Prasenjit Roy (MCA/M/06/01/14)

Debajit Chakraborty (MCA/M/06/05/14)

Under the Supervision and Guidance of

Dr. Abhishek Das

Assistant Professor, Department of IT



#### Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022.

Certified that the work contained in the project report entitled "TUTORIALSTUTOR APP BASED ON ANDROID", by Prasenjit Roy (MCA/M/06/01/14), Registration No (07200 of 2011-12) Debajit Chakraborty (MCA/M/06/05/14), Registration No (014335 of 2011-12) Tripura University, Suryamaninagar, India, is a record of bonfire project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Dr. Abhishek Das

(Supervisor)

**Assistant Professor** 

Department of Information Technology

Tripura University

Shri Jayanta Pal

(Project Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Shri Alak Roy

(Coordinator)

Assistant Professor

Department of Information Technology

### **Audit Management System**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

### **Master of Computer Application**

by

Subhendu Bikash Datta

MCA/M/06/02/14

Dipayan Ghosh

MCA/M/06/09/14

Under the Supervision and Guidance of

Mr. Nilkamal De Purkayastha

Scientist-C, System Analyst National Informatics Centre, Tripura State Centre, Agartala

&

Dr. Abhishek Das

Assistant Professor Department of IT, Tripura University



#### Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India 799022

Certified that the work contained in the project report entitled "Audit Management System", by Dipayan Ghosh Registration No 10974 of 2011-12 Roll No MCA/M/06/09/14, Subhendu Bikash Datta Registration No. 12944 of 2011-12 Roll No. MCA/M/06/02/14 to Tripura University, Suryamaninagar, Agartala, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Dr. Abhishek Das

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Shri Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Shri Alak Roy

(Coordinator)

Assistant Professor

Department of Information Technology

## Easy Commute System

Project report submitted in partial fulfilment of the requirements for the award of the degree of

## **Master of Computer Application**

Diptanu Basak, MCA/M/6/08/14

Under the Supervision and Guidance of

Dr. Abhishek Das Assistant Professor, Department of IT



## DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "Easy Commute System", by Diptanu Basak, Registration Number 12952 of 2011-2012 to Tripura University, Suryamaninagar, India, is a record of bonafide project Work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Dr. Abhishek Das (Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Shri Jayanta Pal (Project Co-ordinator)

Assistant Professor

Department of Information Technology

Tripura University

Shri Alak Roy

(Co-ordinator)

Assistant Professor

Department of Information Technology

## School Management System

Project report submitted in partial fulfilment of the requirements for the award of the degree of

## **Master of Computer Application**

RajuBhowmik

MCA/M/6/10/14

Sujoy Roy Karmakar

MCA/M/6/11/14

Under the Supervision and Guidance of Mr.Swarup Nandi Lecturer, Department of IT



## DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

Certified that the work contained in the project report entitled "School Management System". by Raju Bhowmik, Roll Number MCA/M/6/10/14, Sujoy Roy karmakar, Roll Number MCA/M/6/11/14 ,to Tripura University, Suryamaninagar, India, is a record of standalone project Work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Sran 31/05/17

Swarup Nandi Project Supervisor Lecturer Department of Information Technology Tripura University

Jayanta Pal (Project Co-ordinator) Assistant Professor Department of Information Technology Tripura University

of Information Technology.

Tripura University.

Alak Roy

(Co-ordinator)

Assistant Professor

Department Of Information Technology

## A New Algorithm for Removal of High Density Salt and Pepper Noise in MRI Images

Thesis report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

By

#### Anindita Mohanta

MCA/F/06/20/14

Under the Supervision and Guidance of

Mr. Sumanta Saha

Lecturer, Department of IT



#### Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "A New Algorithm for Removal of High Density Salt and Pepper Noise in MRI Images", by Anindita Mohanta, (MCA/F/06/20/14) to Tripura University, Suryamaninagar, India, is a record of bona fide project work carried out under my supervision and guidance of Mr. Sumanta Saha, lecturer of IT department and is worthy of consideration for the award of the degree of **Master of Computer Application** of the University.

Sumantz Sala 3015/17.

Mr. Sumanta Saha

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Deptt. of Information Technology, Tripura University.

(Coordinator)

Mr. Alak Roy

Assistant Professor

Department of Information Technology

### **SRAMASUVIDHA**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

## **Master of Computer Application**

By

### ARJAMA CHOWDHURI

MCA/F/06/12/14

#### GEETASREE PAUL

MCA/F/06/11/14

Under the Supervision and Guidance of

Mr. Bimal Kanti Biswas

Scientist D, NIC, Agartala

and

Mr. Swarup Nandi

Lecturer, Department of IT, TU



## **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "SRAMASUVIDHA" by Arjama Chowdhuri, Registration Number 12956 of 2011-12, Roll No. MCA/F/06/12/14 and Geetasree paul, Registration Number 12975 of 2011-12, Roll No. MCA/F/06/11/14 Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Swarup Nandi

(Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy of Information Tech

Lubria University.

Assistant Professor

Department of Information Technology

Tripura University

Mr. Jayanta Paul

(Project Coordinator)

Assistant Professor

Department of Information Technology

## Accounts Software For AG (Audit) Tripura

Project report submitted in partial fulfilment of the requirements for the award of the degree of

## Master of Computer Application

by

Banashree Deb

MCA/F/6/05/14

Under the Supervision and Guidance of

Mrs. Tandra Sarkar

Guest Teacher, Department of IT, Tripura University



## Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

Certified that the work contained in the project report entitled "Accounts Software For AG (Audit) Tripura", by Banashree Deb, Registration Number 12974 of 2011-12 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mrs. Tandra Sarkar

(Project Supervisor)

Guest Teacher

Department of Information Technology

Tripura University

Mr. Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Coordinator of the Department)

**Assistant Professor** 

Department of Information Technology

#### **Online Voting System**

Project report submitted in partial fulfillment of the requirements for the award

Of the degree of

#### **Master of Computer Application**

By Priya Acharjee MCA/F/6/14/14 Sanchita Bhattacharjee MCA/F/6/15/14

Under the Supervision and Guidance of Mr.Bhaskar Biswas Guest Lecturer, Department of IT



Department of Information Technology
TRIPURA UNIVERSITY
(A Central University)
Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "Online Voting System", by Priya Acharjee, Registration Number 007051 of 2011-12, Sanchita Bhatacharjee, Registration Number 18114 of 2014-15, to Tripura University, Suryamaninagar, India, is a record of bonafide project Work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr.Bhaskar Biswas (Project Supervisor)

Guest Lecturer

Department of Information Technology

Tripura University

Mr. Jayanta Pal (Project Coordinator) Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy Deat of Indura University

(Coordinator)

sistant Pr

Assistant Professor

Department of Information Technology Tripura University

## e-Filing Portal System for Tripura University

Project report submitted in partial fulfillment of the requirements for the award of the degree of

## **Master of Computer Application**

Submitted By

Asha Negi

MCA/F/6/07/14

Under the Supervision and Guidance of

Mr. Alak Roy

Assistant Professor, Department of IT



## Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India -799022

Certified that the work contained the project report entitled "e-Filing Portal System for Tripura University", by Asha Negi, MCA/F/6/07/14 to Tripura University, Suryamaninagar, India, is a record of bona-fide project work carried out under my supervision and guidance and is worthy of consideration for the award of degree of Master of Computer Application of the University.

Mr. Alak Roy

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Coordinator)

Assistant Professor

Department of Information Technology

## ONLINE EXAMINATION SYSTEM

Project report submitted in partial fulfillment of the requirements for the award of the degree of

### **Master of Computer Application**

by

Simi Dhar (MCA/F/06/01/14) Taniya Biswas (MCA/F/06/02/14)

Under the Supervision and Guidance of

Mr.Jayanta Pal
Assistant Professor, Department of IT



# Department of Information Technology TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "Online Examination System". by Simi Dhar MCA/F/06/01/14 and Taniya Biswas MCA/F/06/02/14 to Tripura University. Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Bachelor/Master of Computer Application of the University.

(Project Supervisor)

Assistant Professor

Department of Information Technology

**Tripura University** 

Mr.Jayanta Pal

(Project Coordinator)

Assistant Professor

Department of Information Technology

**Tripura University** 

Deptt. of Information Technology. Tripura University.

Mr. Alak Roy

(Co-ordinator)

**Assistant Professor** 

Department of Information Technology

#### Tripura Forest Department MIS

Project report submitted in partial fulfillment of the requirements

For the examination of the course

#### **Masters of Computer Application**

By

Anindita Ganguly (MCA/F/06/09/14)

Debalina Roy (MCA/F/06/10/14)

Under the Supervision and Guidance of

Mr. Supratim Lodh

Scientist D, NIC, Agartala

and

Jayanta Pal

Assistant Professor, Department of IT



# DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY

(A Central University)
SURYAMANINAGAR - 799022, TRIPURA

Certified that the work contained in the project report titled "Tripura Forest Department MIS" by Anindita Ganguly, Registration no. 12977 and Debalina Roy, Registration No. 007053 to Tripura University, Suryamaninagar, India, is a record of bonafied project work carried out under supervision and guidance and is worthy of consideration for the award of the degree of Masters of Computer Application.

8000 31 10 STE

Jayanta Pal

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Jayanta Pal

(Project Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Alak Roy

(Coordinator)

Assistant Professor

Department of Information Technology

# Biometric Attendance System Using Fingerprint Device

The project report is submitted in partial fulfilment of the requirements for the award of the degree of

#### **Master of Computer Application**

by

Name: Tania Dhar

MCA/F/06/11/13

Name: Nibedita Choudhury

MCA/F/06/03/13

Name: Kaushik Kumar Dhar

MCA/M/06/14/13

under the Supervision and Guidance of

Jayanta Pal

Assistant Professor, Department of IT



#### Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

# CERTIFICATE

21.06.2016 Application and the project evaluation and viva-voce examination has been held on Registration Number: 17544 of 2013-2014 is approved for the subject of Master of Computer 2014, Nibedita Choudhury, Registration Number: 08006 of 2010-2011 and Kaushik Kr Dhar, FINGERPRINT DEVICE" submitted by Tania Dhar, Registration Number: 17546 of 2013-This is to certify that the project entitled "BIOMETRIC ATTENDANCE SYSTEM USING

Sandi 20/06/16

INTERNAL EXAMINER

EXTERNAL EXAMINER

# Sterilization System of Hospital

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by

Kamalika Debnath, MCA/F/6/04/13

Rajesh Bhowmik, MCA/M/6/08/13

Under the Supervision and Guidance of Jayanta Pal Assistant Professor, Department of IT



## Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "Official Website Of Central Sterilization System", by Kamalika Debnath, Registration Number 009393, Rajesh Bhowmik , Registration Number 012484, to Tripura Suryamaninagar, India, is a record of bonafide project Work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Jayanta Pal (Project Supervisor) Assistant Professor Department of Information Technology Tripura University

Shibendu Debbarma (Project Coordinator) **Assistant Professor** 

Department of Information Technology

Tripura University

Shibendu Debbarma (Head of the Department) Assistant Professor Department of Information Technology Tripura University

# Inpumpkin - Website that shows creativity

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by

Janmajit Deb

MCA/M/6/03/13

Under the Supervision and Guidance of

Jayanta Paul

Assistant Professor, Department of IT



# DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

#### **CERTIFICATE**

This is to certify that the project entitled "Inpumpkin" Project Report of Information Technology Department submitted by Janmajit Deb, Registration Number 013053 are approved for the award of Degree of Master of Computer Application and the project evaluation and viva-voce examination has been held on date:- 21st June 2016.

Snor21/06/16

INTERNAL EXAMINER

EXTERNAL EXAMINER

# TRIPURA UNIVERSITY STUDENT INFO

Project report submitted in partial fulfillment of the requirements of MCA 6<sup>th</sup> semester of the course

## **Master of Computer Application**

by

#### Pritam Poddar

(MCA/6/M/02/13)

Under the Supervision and Guidance of

**Utpal Pal** 

System Analyst

Tripura University (A Central University)



### **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022.

Certified that the work contained in the project report entitled "Tripura University Student Info", by Pritam Poddar, Registration Number 008013 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Utparla/ 2016

Utpal Pal
Project Supervisor
System Analyst
Tripura University
(A Central University)

Shibendu Debbarma
(Head of the Department)
Assistant Professor
Department of Information Technology
Tripura University
(A Central University)

#### **Online Remote Care of Patients**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

Mousumi Ghosh, MCA/F/06/05/13

Samir Das, MCA/M/06/01/13

Under the Supervision and Guidance of Shibendu Debbarma

Assistant Professor, Department of Information Technology



#### DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

#### **CERTIFICATE**

This is to certify that the project entitled "Online Remote Care of Patients" Project Report of Information Technology Department submitted by Mousumi Ghosh, Registration Number 007965, Samir Das, Registration Number 009928, are approved for the award of Degree of Master of Computer Application and the project evaluation and viva-voce examination has been held on date:- 20<sup>th</sup> and 21<sup>st</sup> June 2016.

Soasdi 106/16

INTERNAL EXAMINER

121/6/16 Dr. S.D. Barma.

EXTERNAL EXAMINER

# ONLINE MANAGEMENT INFORMATION SYSTEM

Project report submitted in partial fulfillment of the requirements of the course

# **Master of Computer Application**

By

Subhrajit Das (MCA/M/6/10/13)

Rakesh Das (MCA/M/6/04/13)

Sangita Chakraborty (MCA/F/6/01/13)

Under the Supervision and Guidance of

Jayanta Pal

Assistant Pro

r, Department of Information Technology



#### Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022.

I--- 2016

# CERTIFICATE

award of Degree of Master of Computer Application and the project evaluation and Subhrajit Das(MCA/M/6/10/13), Rakesh Das(MCA/M/6/04/13) approved for the viva-voce examination has been held on th June, 2016. This INFORMATION SYSTEM" submitted by Sangita Chakraborty (MCA/F/6/01/13), is to certify that the project entitled "ONLINE MANAGEMENT

grandi 20/06/16

INTERNAL EXAMINER(s)

EXTERNAL EXAMINER

# Virtual Classroom

Project report submitted in partial fulfillment of the requirements for the award of the degree of

# **Master of Computer Application**

by

Deepak Dev, MCA/M/6/13/13

Joydeb Rudra Paul, MCA/M/6/17/13

Tamojit sen, MCA/M/6/05/13

Under the Supervision and Guidance of Mr. Suman Das System Analyst, Tripura University



#### DEPARTMENT OF INFORMATION TECHNOLOGY

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India – 799022

Certified that the work contained in the project report entitled "VIRTUAL CLASSROOM", by Deepak Dev, Registration Number 17548 of 2013-2014, Joydeb Rudra Paul, Registration number 013061 of 2010-2011, Tamojit Sen, Registration number 013052 of 2010-2011, to Tripura University, Suryamaninagar, India, is a record of bonafide project Work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Suman Das

(Project Supervisor)

System Analyst

Tripura University

Mr. Shibendu Debbarma

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head of the Department)

Assistant Professor

Department of Information Technology

## **Smart Phone Based IoT Application Development**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

Submitted By

Titan Deb

MCA/M/06/12/13

Under the Supervision and Guidance of

Shibendu Debbarma

Assistant Professor, Department of Information Technology



#### **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India -799022

# CERTIFICATE

of Master of Computer Application and the project evaluation and vice-voice examination has been held on 20th to 21st June 2016. Registration No. 13051 of the year 2010-2011 is approved for the award of Degree This is to certify that the project entitled "Smart Phone Based IoT Application Development" of Information Technology Department submitted by Titan Deb,

Snaron 20/06/16

INTERNAL EXAMINER

EXTERNAL EXAMINER

\$ 00 6 16 Basme

# **Online Immunization System**

Project report submitted in partial fulfilment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Antara Roy (MCA/F/6/10/13)
Sinku Debnath (MCA/M/6/11/13)

Under the Supervision and Guidance of

Shibendu Debbarma

Assistant Professor, Department of Information Technology



#### **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022.

Certified that the work contained in the project report entitled "Online Immunization System" by Antara Roy Registration Number 013045, Sinku Debnath Registration Number 007999 to Tripura University, Suryamaninagar, India, is a record of bonfire project work carried out under my supervision and guidance and is worthy of consideration for the award in of the degree of Master of Computer Application of the University.

A Shibendu Debbarma
(Project Supervisor & Head of the Department)
Assistant Professor
Department of Information Technology
Tripura University

1 brefix mixing



Government of India

Ministry of Communications & Information Technology

Department of Electronics & Information Technology

National Informatics Centre

Tripura

This is to certify that Mr. SINKU DEBNATH, Son of Sri. OULAL DEBNATH, MCA Final Semester student of Inpura University has undergone project work in National Informatics Centre, Tripura. The project titled Immunization system was completed within the period of 30 Jan 2016 to 15 Jun 2016. The technology adapted was Java.

( June

State Informatics Officer

STATE INFORMATICS OFFICER
National Informatics Centre
Deal, of Information Technology

Training Coordinator/Guide

PSAI SCIENTIST.0
National informatics Centre
Dept of information Technology
Covt. of India, Agartula

Agantala Agantala \*

#### **CERTIFICATE**

This is to certify that the project entitled "Online Immunization System" submitted by Antara Roy Registration Number 013045, Sinku Debnath Registration Number 007999 is approved for the award of Degree of Master of Computer Application and the project evaluation and viva-voce examination has been held on June, 2016.

Sand 20/06/16

INTERNAL EXAMINER

or. S. D. Ball

**EXTERNAL EXAMINER** 

#### **IPv4 Internet Traffic Characterization**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

By Rinti Dey (MCA/F/6/07/13) Sunandita Nandi (MCA/F/6/02/13) Aireena Debbarma (MCA/F/6/08/13)

Under the Supervision Guidance of

Shibendu Debbarma

Assistant Professor, Department of Information Technology



#### Department of Information Technology TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar, Tripura, India - 799022
June, 2016

Certified that the work contained in the project entitled "IPv4 Internet Traffic Characterization", by Rinti Dey, Registration Number: 13044 of 2010-2011, Sunandita Nandi, Registration Number: 13050 of 2010-2011, Aireena Debbarma, Registration Number: 0106 of 2010-2011 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision (and guidance) and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Shibendu Debbarma

(Supervisor, Project Coordinator)

and

(Head of the Department)

Assistant Professor

Department of Information Technology

#### CERTIFICATE

This is to certify that the project entitled "IPv4 Internet Traffic Characterization", submitted by Rinti Dey, Registration Number: 13044 of 2010-2011, Sunandita Nandi, Registration Number: 13050 of 2010-2011, Aireena Debbarma, Registration Number: 0106 of 2010-2011 is approved for Master of Computer Application and the project evaluation and viva-voce examination has been held on 20<sup>th</sup> or 21<sup>th</sup> June, 2016.

Spandi 20/06/16

EXTERNAL EXAMINER

INTERNAL EXAMINER

#### **Online Recruitment System**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

Ву

Madhabi Naha (MCA/F/6/19/12)

Under the Supervision and Guidance of

Mr. Sumanta Saha

Lecturer

Department of IT



# Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "Online Recruitment System", by Madhabi Naha, Registration Number 012158 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Sumanta Saha 28/05/2015

Mr. Sumanta Saha

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head-In-Charge)

Assistant Professor & In- Charge

Department of Information Technology

## Online Student Management System

Project report submitted in partial fulfillment of the requirements for MCA 6<sup>th</sup> semester project (MCA-631)

#### **Master of Computer Application**

By

Mrinmoy Chakraborty(MCA/6/M/17/12) SouravMajumdar(MCA/6/M/11/12)

Under the Supervision and Guidance of

Mr. Sakti Debbarma

System Analysist, TU

&

Mr. Sumanta Saha Lecturer, Department of IT



#### Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022 May, 2015

Certified that the work contained in the project report entitled "Online Student Management System", by Mrinmoy Chakraborty (MCA/6/M/17/12) Registration Number 012137 of 2009-2010 and Sourav Majumdar (MCA/6/M/11/12) Registration Number 013334 of 2010-2011 to Tripura University, Suryamaninagar, Tripura, is a record of bonafide project work carried out under our supervision and guidance and is worthy of consideration for the award of the degree of the MCA 6<sup>th</sup> semester Project & Viva voce(MCA-631) of the University.

Mr. Sakti Debbarma

(Project supervisor)

&

Mr. Sumanta Saha

(project guide)

Lecturer

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma 3 C

(Head-in-charge of the Department)

Assistant Professor

Department of Information Technology

## Analysis of different types of security issues in Internet Protocol version 6 (IPv6) network

Thesis submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Pijush Debnath (MCA/6/M/31/12)

Under the Supervision and Guidance of Mr. Shibendu Debbarma
Assistant Professor, Department of IT



# Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "Analysis of different types of security issues in Internet Protocol Version 6 (IPv6) network", by Pijush Debnath, Registration Number 007783 of 2008-2009 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Shibendu Debbarma

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head In-Charge)

**Assistant Professor** 

Department of Information Technology

### CRIME MANAGEMENT SYSTEM

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

By

Manna Chakraborty (MCA/M/06/12)

Kripankar Majumder (MCA/M/34/12)

Under the Supervision and Guidance of
Sandip Roy

Lecturer, Department of IT



**Department of Information Technology** 

TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar, Tripura, India - 799022
june, 2015

Certified that the work contained in the project report entitled "Crime Management System", by Manna Chakraborty (MCA/M/06/12), Kripankar Majumder (MCA/M/34/12) to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Sandip Roy

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Prof. Shibendu Debbarma 271511

(Head In-charge)

Assistant Professor

Department of Information Technology

#### **E-Learning System**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by

Dipankar Bhattacharjee (MCA/06/M/29/12) Sanghita Sinha(MCA/06/F/22/12)

Under the Supervision and Guidance of

Mr. Utpal Paul

Lecturer, Department of IT



# Department of Information Technology TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar - 799022,
Tripura, India

Management System", by Dipankar Bhattacharjee, Registration Number 14885 of 2012-2013 and Sanghita Sinha, Registration Number 005155 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

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Utpal Pal

(Project Supervisor)

(Lecturer)

Department of Information Technology

Tripura University

XRong 105/10

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head In-Charge)

Assistant Professor

Department of Information Technology

## Software to Implement Steganography and Digital Watermarking

Thesis/Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by

#### Priyanka Barman Mousumi Majumder Mousumi Gope

MCA/6/F/02/12 MCA/6/F/27/12 MCA/6/F/30/12

Under the Supervision and Guidance of

**Abhishek Das** 

Assistant Professor, Department of IT



#### Department of Information Technology

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

Certified that the work contained in the project report entitled "Software to implement Steganography and Digital Watermarking", by Priyanka Barman, Mousumi Majumder, Mousumi Gope, Registration Number 012482 of 2009-2010, 012127 of 2009-2010, 012155 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under our supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Shri Abhishek Das

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head In-charge)

Assistant Professor

Department of Information Technology

## Image processing techniques to develop an image editor

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

By

Susmita Banik (MCA/F/6/28/12) Arjun Ch. Das (MCA/M/6/27/12) Samarpita Saha (MCA/F/6/16/12)

Under the Supervision and Guidance of

**Abhishek Das** 

Assistant Professor, Department of IT



#### **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar - 799022, India

May, 2015

Certified that the work contained in the project report entitled "Image Processing Techniques to Develop An Image Editor", by Susmita Banik (MCA/F/6/28/12), Samarpita Saha (MCA/F/6/16/12), Arjun Ch. Das (MCA/M/6/27/12) to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Abhishek Das

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Shibendu Debbarna

(Head-in-Charge)

Assistant Professor

Department of Information Technology

#### e-Wall Magazine for Tripura university

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Bithika Chanda Bhowmik (MCA/F/08/12)

Under the Supervision and Guidance of Mr. Alak Roy
Assistant Professor, Department of IT



#### Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

May, 2015

Certified that the work contained in the project report entitled "e-Wall Magazine for Tripura University", by Bithika Chanda Bhowmik, Registration Number 007912 of 2008-2009 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Alak Roy

25/05/0015

(Project Supervisor and Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head In-Charge)

Assistant Professor & In- Charge

Department of Information Technology

## A PARAMETRIC APPROACH ON IMAGES USING ICA/PCA ALGORITHM.

Thesis report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by

Sutapa Saha (MCA/F/6/20/12) Neelam Debnath (MCA/F/6/21/12)

Under the Supervision and Guidance of Mr. Sumanta Saha
Lecturer, Department of IT



#### **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

29th May, 2015

Certified that the work contained in the project report entitled "A Parametric approach on images using ICA/PCA Algorithm", by Sutapa Saha, Registration Number 012129 of 2009-2010 and Neelam Debnath, Registration Number 001389 of 2008-2009 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Sumanta	Saha 25/05/2015
---------	-----------------

Mr. Sumanta Saha

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

3 2-1 .

Mr. Alak Roy

(Project Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head-In-charge)

**Assistant Professor** 

Department of Information Technology

## TRUST BAZAR (Online store for used goods)

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by Subhrajit Roy (MCA/M/26/12)

Under the Supervision and Guidance of Mr.Sandip Roy
Lecturer, Department of IT



#### Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "Trust Bazar(Online store for used goods)", by Subhrajit Roy, Registration Number 14893 of 2012-2013 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr.Sandip Roy

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarmá

(Head In-Charge)

Assistant Professor & In- Charge

Department of Information Technology

#### e-Portal for Distance Education, Tripura University

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by

Jayshree Nag (MCA/F/6/03/12) Anamika Karmakar (MCA/F/6/18/12)

Under the Supervision and Guidance of

Bappa Datta
Lecturer, Department of IT



Department of Information Technology
TRIPURA UNIVERSITY
(A Central University)
Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "e-Portal for Distance Education, Tripura University", by Jayshree Nag (Reg no.: 012152 of 2009-2010), Anamika Karmakar (Reg no.: 012159 of 2009-2010) to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Bappa Dalla 25.05.15

Mr. Bappa Datta
(Project Supervisor)
Lecture
Department of Information Technology

Tripura University

(Project Coordinator)
Assistant Professor

Department of Information Technology
Tripura University

Mr. Alak Roy

Mr. Shibendu Debbarma

Assistant Professor & Head-In-Charge

Department of Information Technology Tripura University

#### Multipurpose E-Advertise System

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

By

Megdhan Paul (MCA/6/M/08/12) Sougat Nath (MCA/6/M/13/12)

Under the Supervision and Guidance of

Mr. Suman Das

Lecturer, Department of IT



#### Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar-799022, India

May, 2015

#### **Student Administration System**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by Anupama Dey (MCA/6/F/07/12) Tina Saha (MCA/6/F/25/12)

Under the Supervision and Guidance of Mr. Swarup Nandi
Lecturer, Department of IT



#### Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "Student administration system", by Anupama Dey (MCA/6/F/07/12), Tina Saha (MCA/6/F/25/12) to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Srandi 25/05/2015

Mr. Swarup Nandi

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarm

(Head In-Charge)

Assistant Professor

Department of Information Technology

### e-Pariksha: Online Examination System

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Suman Das (MCA/M/6/05/12)
Biswajit Deb (MCA/M/6/07/12)

Under the Supervision and Guidance of

Mr. Alak Roy

Assistant Professor, Department of IT



#### Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "e-Pariksha: Online Examination System", by Suman Das, Registration Number 007911 of 2008-2009 and Biswajit Deb, Registration Number 15972 of 2012-13 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

AKOW 25 05 2015 Mr. Alak Roy

(Project Supervisor and Project Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head In- Charge)

**Assistant Professor** 

Department of Information Technology

## Comparative assessment of different filtering techniques used in Image Processing

Thesis submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by Jayeeta Biswas (MCA/6/F/09/12)

Under the Supervision and Guidance of Mr. Sumanta Saha
Lecturer, Department of IT



#### Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "Comparative assessment of different filtering techniques used in Image Processing", by Jayeeta Biswas, Registration Number 001373 of 2008-2009 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Sumanta Saha 25/05/2015

Mr. Sumanta Saha

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head In-charge)

**Assistant Professor** 

Department of Information Technology

#### E-Portal, PWD, Govt. of Tripura

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Koushik Haldar (MCA/6/M/32/12)
Shibankar Bhowmik (MCA/6/M/24/12)
Bipasha Bhattacharjee (MCA/6/F/14/12)

Under the Supervision and Guidance of Mr. Shibendu Debbarma
Assistant Professor, Department of IT



### Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "E-Portal, PWD, Govt. of Tripura", by Shibankar Bhowmik, Registration Number 001357 of 2008-2009; Koushik Haldar, Registration Number 012149 of 2009-2010 and Bipasha Bhattacharjee, Registration Number 012151 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Shibendu Debbarma

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debparma

(Head In- Charge)

Assistant Professor

Department of Information Technology

## Image Surveillance and Motion Detection with Security Management

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

By Sanchita Gon Chaudhuri (MCA/F/11/12) Manonita Dhar (MCA/F/10/12)

Under the Supervision and Guidance of Shri Abhishek Das Assistant Professor, Department of IT



## Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

June, 2015

?

Certified that the work contained in the project report entitled "Image Sunveillance and

Registration Number 012144 of 2009-2010, Manonita Dhar, Registration Number 012138 of 2009-2010, Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

AD0016/12

Shri Abhishek Das

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Aprod or /.

Mr. Alak Roy

(Project Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Shri Shibendu Debbarma

(Head In-Charge

**Assistant Professor** 

Department of Information Technology

#### E-Municipal System

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### Master of Computer Application

By

Tanmoy Munshi (MCA/6/M/04/12) Suraj Kr Roy (MCA/6/M/33/12)

Under the Supervision and Guidance of

Mr. Suman Das

Lecturer, Department of IT



#### **Department of Information Technology**

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar, Tripura, India - 799022

June, 2015

Certified that the work contained in the project report entitled "E-Municipal System", by Tanmoy Munshi (MCA/6/M/04/12), Suraj Kr Roy (MCA/6/M/33/12) to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Suman Das

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Mr. Shibendu Debbarina

(Head In- Charge)

Assistant Professor

Department of Information Technology

### Web Portal: Department of Information Technology, Tripura University

Project report submitted in partial fulfillment of the requirements for the examination of the degree of

#### **Master of Computer Application**

By

Mousumi Chanda (MCA/VI/F/01/12) Satabdi Roy (MCA/VI/F/05/12) Shanta Bhowmik (MCA/VI/F/29/12)

Under the Supervision and Guidance of Mr. Shibendu Debbarma
Assistant Professor, Department of IT



## Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

June, 2015

Certified that the work contained in the project report entitled "Web Portal: Department of Information Technology", by Mousumi Chanda (MCA/VI/F/01/12), Registration Number 012130 of 2009-2010, Satabdi Roy (MCA/VI/F/05/12), Registration Number 012150 of 2009-2010, Shanta Bhowmik (MCA/VI/F/29/12), Registration Number 012142 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Shibendu Debbarma

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debparma

Head In-Charge

Assistant Professor

Department of Information Technology

#### Office Cybernation System

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

Submitted By

Mousumi Datta (MCA/6/F/15/12) Soma Barman (MCA/6/F/17/12)

Under the Supervision and Guidance of

Mr. Amal Shyam

(ChiefManager, Programming), ONGC, Tripura Asset

and

Shri. Shibendu Debbarma & Shri Abhishek Das Assistant Professor, Department of Information Technology



## Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

June, 2015

Certified that the work contained in the project report entitled "Office Cybernation System", by Mousumi Datta, Registration Number 012143 of 2009-2010 and Soma Barman, Registration Number 012146 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Amal Shyam

(Project Supervisor-Ext)

Chief Manager(Prog)

असाम एवं असाम आरात द्रोगी / A & AAB. Oil and Natural Gas Corporation Limited ओण्जीसी, अमरतसा ONGC, Agartaka.

Tripura Asset

Shri Abhishek Das

(Project Supervisor-Int)

Assistant Professor

Department of Information Technology

Jac /vois

Tripura University

(Project Supervisor-Int)

Shri. Shibendu Debbarm

A Maria Shyam

मुख्य प्रबंधक (पोग्रामिंग) I Chief Mgr. (Prog.)

अग्र आधार | Forward Base,

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

(Head of the Department)

Shri. Shibendu Debbarn

Assistant Professor & In- Charge

Depc tme ... of Information Technology

#### Online Courier Management System

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by Suraj Barua (MCA/6/M/02/12)

Under the Supervision and Guidance of Mr. Sandip Roy
Lecturer, Department of IT



## Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

#### Online Courier Management System

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by Suraj Barua (MCA/6/M/02/12)

Under the Supervision and Guidance of Mr. Sandip Roy
Lecturer, Department of IT



## Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, India

Certified that the work contained in the project report entitled "Online Courier Management System", by Suraj Barua, Registration Number 000563 of 2007-2008; to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Sandip Roy

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

105/2011

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma 3

(Head In-Charge)

Assistant Professor

Department of Information Technology

#### **JULFI: Next Generation Social Discussion Site**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Sandip Debnath (MCA/M/6/14/12)
Suprit Rudra Paul (MCA/M/6/01/12)
Prasenjit Majumder (MCA/M/6/12/12)
Rana Singha (MCA/M/6/03/12)

Under the Supervision and Guidance of Mr. Shibendu Debbarma & Mr. Alak Roy Assistant Professor, Department of IT



## Department of Information Technology TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar - 799022, India

May, 2015

Generation Social Discussion Site", by Sandip Debnath, Registration Number 00063 of 2007-2008; Suprit Rudra Paul, Registration Number 012485 of 2009-2010, Prasenjit Majumder, Registration Number 012124 of 2009-2010 and Rana Singha, Registration Number 012123 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under our supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Mr. Shibendu Debbarma

Mr. Alak Roy

(Project Supervisor)

Assistant Professor

Department of Information Technology

197/05/2015

Tripura University

(Project Supervisor)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

Assistant Professor

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head of the Department)

Assistant Professor & In-Charge

Department of Information Technology

#### **TU Tender Management System**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by
Apu Nath Chowdhury (MCA/06/M/09/12)
Swarup Debnath (MCA/06/M/22/12)

Under the Supervision and Guidance of

Mr. Utpal Pal

Lecturer, Department of IT



## Department of Information Technology TRIPURA UNIVERSITY

(A Central University) Suryamaninagar - 799022, Tripura, India

June, 2015

Certified that the work contained in the project report entitled "TU Tender Management System", by Apu Nath Chowdhury, Registration Number 006692 of 2009-2010 and Swarup Debnath, Registration Number 005153 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance is worthy of consideration for the award of the degree of Master of Computer Application of the University.

26/5/201

Mr. Utpal Pal

(Project Supervisor)

Lecturer

Department of Information Technology

Tripura University

Mr. Alak Roy

(Project Coordinator)

**Assistant Professor** 

Department of Information Technology

Tripura University

Mr. Shibendu Debbarma

(Head In-Charge)

Assistant Professor

Department of Information Technology

#### **Online Professional Search**

Project report submitted in partial fulfillment of the requirements of MCA 6<sup>th</sup> semester of the course

#### **Master of Computer Application**

By

Bhabatosh Das (MCA/6/M/16/12) Satyabrata Debnath (MCA/6/M/10/12)

Under the Supervision and Guidance of
Shri. Abhishek Das
Assistant Professor, Department of IT



#### **Department of Information Technology**

TRIPURA UNIVERSITY
(A Central University)
Suryamaninagar, Tripura, India - 799022.

Certified that the work contained in the project report entitled "ONLINE PROFESSIONAL SEARCH", by Bhabatosh Das (MCA/6/M/16/12), Registration No (012135 of 2009-10) and Satyabrata Debnath (MCA/6/M/10/12), Registration No (012136 of 2009-10) Tripura University, Suryamaninagar, India, is a record of bonfire project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

Abhishek Das

(Project Supervisor)

Assistant Professor

Alak Roy

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Assistant Professor

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Shibendu Debbarma<sup>2</sup>

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Assistant Professor

Department of Information Technology

# Realization of the Network as-a-service cloud computing paradigm or Software-Defined Environments (SDE)

Thesis report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by Jayanta Saha (MCA/M/6/18/12)

Under the Supervision and Guidance of

Mr. Shibendu Debbarma

**Assistant Professor** 

Department of Information Technology



## Department of Information Technology TRIPURA UNIVERSITY

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Certified that the work contained in the project report entitled "Realization of the Network as-a-service cloud computing paradigm or Software-Defined Environments (SDE)", by Jayanta Saha, Registration Number 05160 of 2009-2010 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

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### e-Swajal

Project report submitted in partial fulfilment of the requirements for the award of the degree of

### **Master of Computer Application**

by Nilanjan Chakraborty(MCA/M/6/30/12)

Under the Supervision and Guidance of

Mr.Sushanta Kumar Debnath.

Scientific Officer-SB & DIO, National Informatics Centre (NIC), Khowai.

Mr.Suman Das

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Certified that the work contained in the project report entitled "e-Swajal", by Nilanjan Chakraborty, Registration Number 14886 of 2012-13 and Roll No MCA/M/6/30/12 to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

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#### **Online Admission System**

Project report submitted in partial fulfillment of the requirements for the award of the degree of

#### **Master of Computer Application**

by Mithun Roy (MCA/6/M/19/12) Sanjib Shee Choudhury (MCA/6/M/25/12)

Under the Supervision and Guidance of Mr. Swarup Nandi
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June, 2015

Certified that the work contained in the project report entitled "Online Admission System", by Mithun Roy(MCA/6/M/19/12), Sanjib Shee Choudhury (MCA/6/M/25/12) to Tripura University, Suryamaninagar, India, is a record of bonafide project work carried out under my supervision and guidance and is worthy of consideration for the award of the degree of Master of Computer Application of the University.

gnondi3/06/15

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