

NO. C/196946



INDEX NO. E1-069

WEST BENGAL BOARD OF SECONDARY EDUCATION

MARK SHEET OF MADHYAMIK PARIKSHA
(SECONDARY EXAMINATION) 2003

ROLL

E0081

NO.

0088

NAME SUBHRENDU CHATTOPADHYAY

S/O OF SUBHAS CH. CHATTOPADHYAY

APPEARING FROM SARGACHI RAMAKRISHNA MISSION HIGH SCHOOL

HIS/HER COMBINATION OF SUBJECTS (IN SYMBOLS) BFL ESL LG

PASS MARKS IN EACH GROUP - 34%. QUALIFYING MARKS (INCLUDING ORAL) IN EACH SUBJECT - 20%.



LANGUAGE GROUP						SCIENCE GROUP								INDIA & HER PEOPLE GROUP							ADDL.
FL-(WRITTEN) FIRST PAPER (FULL MARKS - 90)	FL-(WRITTEN) SECOND PAPER (FULL MARKS - 90)	FL-(ORAL) (FULL MARKS - 20)	FIRST LANGUAGE (FULL MARKS - 200)	SECOND LANGUAGE (FULL MARKS - 100)	GROUP TOTAL (FULL MARKS - 300)	MATHEMATICS (FULL MARKS - 100)	PSC.(WRITTEN) (FULL MARKS - 90)	PSC.(ORAL) (FULL MARKS - 10)	PHYSICAL SCIENCE (FULL MARKS - 100)	LSC.(WRITTEN) (FULL MARKS - 90)	LSC.(ORAL) (FULL MARKS - 10)	LIFE SCIENCE (FULL MARKS - 100)	GROUP TOTAL (FULL MARKS - 300)	HISTORY (WRITTEN) (FULL MARKS - 90)	HISTORY (ORAL) (FULL MARKS - 10)	HISTORY (FULL MARKS - 100)	GEO. (WRITTEN) (FULL MARKS - 90)	GEO. (ORAL) (FULL MARKS - 10)	GEOGRAPHY (FULL MARKS - 100)	GROUP TOTAL (FULL MARKS - 200)	ADDITIONAL ★ (FULL MARKS - 100)
55	72	20	147	75	222	93	74	10	84	70	10	80	257	50	10	60	67	10	77	137	70
** GRAND TOTAL →			652 (Six Hundred Fifty Two)						*** DIVISION →			I #			FIRST						

★ MARKS IN EXCESS OF THE PASS MARKS ARE ADDED TO THE TOTAL OF A SUCCESSFUL CANDIDATE FOR DETERMINING DIVISION.

★★ FULL MARKS - 800 PASS MARKS - 272

★★★ 1st DIV. - 480, 2nd DIV. - 360, 3rd DIV. - 272

A. C. Patra.

SECRETARY

E1-069

E0081-0088

West Bengal Board Of Secondary Education



CORRECTED
Grade 29/6/03
By: [Signature] (R)
West Bengal Bd. of
Secondary Education

MADHYAMIK PARIKSHA (SECONDARY EXAMINATION), 2003

Certified that SUBHRENDU CHATTOPADHYAY
SUBHAS CH.
Son / ~~XXXXXX~~ / ~~XXXX~~ of SUBHRENDU CHATTOPADHYAY
appearing from / ~~XX~~ SARGACHI RAMAKRISHNA MISSION HIGH SCHOOL

Whose date of birth is NINETEENTH day of AUGUST One Thousand Nine Hundred
and EIGHTY SEVEN duly passed the Madhyamik Pariksha (Secondary Examination)
held in the month of March, 2003 and was placed in the FIRST division



Kolkata-700 016,

Dated, the 13th June, 2003 Aman Chandra Patra
Secretary

Subyendu Bikas Hota
President

004239

136453

WEST BENGAL COUNCIL OF HIGHER SECONDARY EDUCATION

MARK-SHEET



INSTITUTION
CODE

NO.

GENERAL STREAM COURSES

16019

B153978

2006

THE FOLLOWING IS THE STATEMENT OF MARKS OBTAINED BY

SUBHRENDU CHATTOPADHYAY

ROLL 521111

NO. 0030

AT THE HIGHER SECONDARY EXAMINATION 2006.

SUBJECTS

MARKS OBTAINED

LANGUAGE	THEORY			PRACTICAL/ ORAL	SUBJECT TOTAL
	PAPER I	PAPER II	TOTAL		
BNGA	59	57	116		116
ENGB	61	42	103		103
COMPULSORY ELECTIVE					
CHEM	64	66	130	37	167L
MATH	80	80	160		160L
PHYS	57	55	112	35	147
OPTIONAL ELECTIVE					
B IOS	57	48	105	37	142
					82
* MARKS ADDED					
AWARD					
GRAND TOTAL			SEVEN SEVEN FIVE	*	775
RESULT DIVISION			PASSED FIRST		1
PLEASE SEE REVERSE				SECRETARY	

Sebnish Sarkar

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the **FIRST YEAR B.TECH. FIRST (ODD) SEMESTER EXAMINATION OF 2006-07** of

Name **SUBHRENDU CHATTOPADHYAY** Roll No. **11501061032**

Registration No. **115010111022 OF 2006-2007**

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
HU101	ENGLISH LANGUAGE & COMMUNICATION	B	7	3	21
PH101	ENGINEERING PHYSICS	C	6	4	24
MI01	MATHEMATICS	D	5	4	20
ME101	MECHANICAL SCIENCES	A	8	4	32
EE101	BASIC ELECTRICAL ENGINEERING	D	5	4	20
CH101	ENVIRONMENT & ECOLOGY	A	8	3	24
PH191	ENGINEERING PHYSICS LAB.	E	9	2	18
EE191	ELECTRICAL ENGINEERING LAB.	A	8	2	16
ME191	ENGINEERING GRAPHICS	E	9	2	18
ME192	WORKSHOP PRACTICAL	D	10	2	20
Total				30	213

SGPA FIRST YEAR FIRST (ODD) SEMESTER : 7.10

SGPA

YGPA

Result

College / Institution B.P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

Kolkata, The **16TH FEBRUARY 2007**


Controller of Examinations

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the FIRST YEAR B. TECH. SECOND (EVEN) SEMESTER EXAMINATION OF 2006-07 of

Name SUBHRENDU CHATTOPADHYAY Roll No. 11501061032

Registration No. 115010111022 OF 2006-2007

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
PH201	ENGINEERING PHYSICS	C	6	4	24
M201	MATHEMATICS	E	9	4	36
ME201	MECHANICAL SCIENCES	A	8	3	24
CS201	INTRODUCTION TO COMPUTING	A	8	3	24
EC201	BASIC ELECTRONICS ENGINEERING	B	7	4	28
CH201	ENGINEERING CHEMISTRY	D	5	3	15
PH291	ENGINEERING PHYSICS LAB	E	9	1	9
CH291	ENGINEERING CHEMISTRY LAB	A	8	1	8
CS291	COMPUTING LAB	D	10	2	20
EC291	ELECTRONICS ENGINEERING LAB	D	10	2	20
ME291	ENGINEERING GRAPHICS	D	10	2	20
ME292	WORKSHOP PRACTICAL	D	10	2	20
Total				31	248

SGPA FIRST YEAR FIRST (ODD) SEMESTER : 7.10


SGPA FIRST YEAR SECOND (EVEN) SEMESTER : 8.00

YGPA FIRST YEAR : 7.56

Result : P

College / Institution B. P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

Kolkata, The 22ND AUGUST 2007


 Controller of Examinations

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the **SECOND YEAR B. TECH. (CSE) FIRST (ODD) SEMESTER EXAMINATION OF 2007-08** of

Name **SUBHRENDU CHATTOPADHYAY** Roll No. **11501061032**

Registration No. **115010111022 OF 2006-2007**

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
M301	MATHEMATICS	A	8	4.0	32.0
CS302	DATA STRUCTURE & ALGORITHMS	A	8	4.0	32.0
EE301	CIRCUIT THEORY & NETWORKS	C	6	4.0	24.0
CS303	COMPUTER ORGANISATION	B	7	3.0	21.0
EC312	DIGITAL ELECTRONICS & LOGIC DESIGN	B	7	4.0	28.0
CS301	PRINCIPLES OF PROGRAMMING LANGUAGE	E	9	3.0	27.0
CS392	DATA STRUCTURES LAB	D	10	2.0	20.0
EC382	DIGITAL ELECTRONICS AND LOGIC DESIGN LAB	E	9	2.0	18.0
CS391	PROGRAMMING PRACTICE LAB	E	9	2.0	18.0
EE391	CIRCUITS & NETWORKS LAB	E	9	2.0	18.0
Total				30.0	238.0

SGPA SECOND YEAR FIRST (ODD) SEMESTER : 7.93

SGPA -

YGPA -

Result -

College / Institution B. P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

Kolkata, The 15TH MARCH 2008

Controller of Examinations

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the SECOND YEAR BTECH (CSE) SECOND (EVEN) SEMESTER EXAMINATION OF 2007-08 of

Name SUBHRENDU CHATTOPADHYAY Roll No. 11501061032

Registration No. 115010111022 OF 2006-2007

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
M401	MATHEMATICS	E	9	4.0	36.0
CS401	FORMAL LANGUAGE & AUTOMATA THEORY	B	7	4.0	28.0
MCS402	OPERATION RESEARCH & OPTIMISATION TECHNIQUES	A	8	4.0	32.0
EC411	PRINCIPLES OF COMMUNICATION ENGG.	B	7	3.0	21.0
CS403	ADVANCED COMPUTER ARCHITECTURE	B	7	4.0	28.0
CS492	OPERATION RESEARCH LAB	D	10	2.0	20.0
CS493	COMPUTER ARCHITECTURE & ORGANIZATION LAB	E	9	2.0	18.0
EC481	COMMUNICATION ENGINEERING LAB	D	10	2.0	20.0
HU481	TECHNICAL REPORT WRITING & LANGUAGE PRACTICE LAB	A	8	2.0	16.0
Total				27.0	219.0

SGPA SECOND YEAR FIRST (ODD) SEMESTER : 7.93

SGPA SECOND YEAR SECOND (EVEN) SEMESTER : 8.11

YGPA SECOND YEAR : 8.02

Result : P

College / Institution B. P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

Kolkata, The 04TH AUGUST 2008

Controller of Examinations

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the THIRD YEAR B. TECH. (CSE) FIRST (ODD) SEMESTER EXAMINATION OF 2008-09 of

Name SUBHRENDU CHATTOPADHYAY Roll No. 11501061032

Registration No. 115010111022 OF 2006-2007

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
CS501	OPERATING SYSTEM	B	7	3.0	21.0
CS502	DATABASE MANAGEMENT SYSTEM	A	8	3.0	24.0
CS503	DESIGN & ANALYSIS OF ALGORITHM	B	7	4.0	28.0
EI502	MICROPROCESSOR & MICROCONTROLLERS	B	7	4.0	28.0
EE503	CONTROL SYSTEMS	C	6	4.0	24.0
CS591	OPERATING SYSTEM LAB	D	10	2.0	20.0
CS592	DATABASE MANAGEMENT SYSTEM LAB	D	10	2.0	20.0
EI592	MICROPROCESSOR & MICROCONTROLLERS LAB	D	10	2.0	20.0
EE593	CONTROL SYSTEM LAB	E	9	2.0	18.0
Total				26.0	203.0

SGPA THIRD YEAR FIRST (ODD) SEMESTER : 7.81

SGPA -

YGPA -

Result -

College / Institution B. P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

Kolkata, The 27TH FEBRUARY 2009


Controller of Examinations

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the **THIRD YEAR BTECH (CSE) SECOND (EVEN) SEMESTER EXAMINATION OF 2008-09** of

Name **SUBHRENDU CHATTOPADHYAY** Roll No. **11501061032**

Registration No. **115010111022** OF **2006-2007**

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
CS601	COMPUTER NETWORK	A	8	4.0	32.0
CS602	SOFTWARE ENGINEERING	A	8	4.0	32.0
CS603	COMPUTER GRAPHICS & MULTIMEDIA	A	8	3.0	24.0
CS604	SYSTEM SOFTWARE AND ADMINISTRATION	A	8	3.0	24.0
CS605	OBJECT TECHNOLOGY & UML	A	8	3.0	24.0
CS691	COMPUTER NETWORK LAB	D	10	2.0	20.0
CS693	COMPUTER GRAPHICS & MULTIMEDIA LAB	D	10	2.0	20.0
CS694	SYSTEM SOFTWARE & ADMINISTRATION LAB	D	10	2.0	20.0
CS695	OBJECT TECHNOLOGY LAB	D	10	2.0	20.0
CS682	GR. DISCUSSION & SEMINAR	D	10	2.0	20.0
Total				27.0	236.0

SGPA THIRD YEAR FIRST (ODD) SEMESTER : 7.81

SGPA THIRD YEAR SECOND (EVEN) SEMESTER : 8.74

YGPA THIRD YEAR : 8.28

Result : P

College / Institution B. P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

Kolkata, The **25TH AUGUST 2009**

Controller of Examinations

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the **FOURTH YEAR B.TECH.(CSE) FIRST (ODD) SEMESTER EXAMINATION OF 2009-10** of

Name **SUBHRENDU CHATTOPADHYAY** Roll No. **11501061032**

Registration No. **115010111022** OF **2006-2007**

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
CS701	LANGUAGE PROCESSOR	B	7	3	21
CS702	ARTIFICIAL INTELLIGENCE	A	8	3	24
CS703	VISUAL PROGRAMMING & WEB TECHNOLOGY	C	6	3	18
HU701	FINANCIAL MANAGEMENT AND ACCOUNTS	B	7	3	21
CS704D	ADVANCED OPERATING SYSTEM	B	7	3	21
CS792	ARTIFICIAL INTELLIGENCE LAB	E	9	2	18
CS793	VISUAL PROGRAMMING & WEB TECHNOLOGY LAB	D	10	2	20
CS795	ASSIGNED PROJECT	E	9	4	36
CS781	PRACTICAL TRAINING EVALUATION	D	10	2	20
CS782	SEMINAR ON ASSIGNED/ SELECTED TOPIC	D	10	2	20
Total				27	219

SGPA FOURTH YEAR FIRST (ODD) SEMESTER : 8.11

SGPA -

YGPA -

Result -

College / Institution B.P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

Kolkata, The **2ND MARCH 2010**


Controller of Examinations

WEST BENGAL UNIVERSITY OF TECHNOLOGY



GRADE CARD

For the **FOURTH YEAR B. TECH. (CSE) SECOND (EVEN) SEMESTER EXAMINATION OF 2009-10** of

Name **SUBHRENDU CHATTOPADHYAY**

Roll No. **11501061032**

Registration No. **115010111022** OF **2006-2007**

Subject Code	Subjects Offered	Letter Grade	Points	Credit	Credit Points
HUB01	VALUES & ETHICS IN PROFESSION	B	7	3	21
HUB02	INDUSTRIAL MANAGEMENT	D	5	3	15
CS801E	E-COMMERCE AND ERP	A	8	3	24
CS802E	ADVANCED JAVA PROCESSING	A	8	3	24
CS881	COMPREHENSIVE VIVA-VOCE	E	9	4	36
CS882	PERSONALITY DEVELOPMENT	O	10	2	20
CS883	ASSIGNED PROJECT	E	9	8	72
Total				26	212

SGPA FOURTH YEAR FIRST (ODD) SEMESTER : **8.11**

SGPA FOURTH YEAR SECOND (EVEN) SEMESTER : **8.15**

YGPA FOURTH YEAR : **8.13**

Result : **P** DGPA : **8.04**

College / Institution **B. P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY**

DGPA = $(1 \times \text{YGPA1} + 1 \times \text{YGPA2} + 1.5 \times \text{YGPA3} + 1.5 \times \text{YGPA4})$

(DEGREE GRADE POINT AVERAGE) **5**

Kolkata, The **27TH JULY 2010**


Controller of Examinations

Classification	Letter Grade	Score on 100 Percentage Points	Points
Outstanding	O	100 to 90	10
Excellent	E	89 to 80	9
Very Good	A	79 to 70	8
Good	B	69 to 60	7
Fair	C	59 to 50	6
Below Average	D	49 to 40	5
Failed	F	Below 40	2
Incomplete	I	—	2

$$\text{SGPA (Semester Grade Point Average)} = \frac{\text{Credit Index}}{\sum \text{Credits}}$$

$$\text{YGPA (Yearly Grade Point Average)} = \frac{\text{Credit Index Odd Semester} + \text{Credit Index Even Semester}}{\sum \text{Credit Odd Semester} + \sum \text{Credit Even Semester}}$$

X	:	Ineligible For Promotion
XP	:	Eligible For Promotion With Backlogs
P	:	Passed And Promoted

The West Bengal University Of Technology

10801090



declares

SUBHRENDU CHATTOPADHYAY

a

Bachelor of Technology

*on having attended the prescribed course of instructions
and fulfilling the requisite professional standard in the
subject assessed through written examinations, projects and
a dissertation*

College B.P. PODDAR INSTITUTE OF MANAGEMENT &
TECHNOLOGY

Branch Computer Science & Engineering

DGPA* 8.04

Year 2010

Given under the seal of the University

Kolkata



Satyauchi Sin Gya

Dated: 8th March 2011

Vice - Chancellor

* Degree Grade Point Average

Indian Institute of Technology Guwahati

Master of Technology GRADE CARD



Program Duration: 2 Years

Semesters: Four (4)

NAME: SUBHRENDU CHATTOPADHYAY

ROLL NO: 124101008

DISCIPLINE : Computer Science and Engineering

Semester I (July - Nov.) 2012

Course	Course name	Cr.	Gr.
CS 512	Data Structures and Algorithms	6	BB
CS 514	Mathematics for Computer Science	8	CD
CS 548	Computer Systems	6	BC
CS 513	Programming Lab	3	AB
CS 562	Machine Learning	6	BB

Semester II (Jan. - May) 2013

Course	Course name	Cr.	Gr.
CS 515	Theory of Computation	6	BC
CS 558	Systems Lab	3	AB
CS 517	Self-Stabilizing Algorithm	6	AA
CS 527	Parallel Computer Architecture	8	AB
CS 522	Embedded Systems	6	BB

Semester III (July - Nov.) 2013

Course	Course name	Cr.	Gr.
CS 698	Project Phase I	24	AA

Semester IV (Jan. - May) 2014

Course	Course name	Cr.	Gr.
CS 699	Project Phase II	24	AA
CS 542	Topics in Distributed Systems (AU)		PP

Semester and Cumulative Performance Index (S.P.I and C.P.I)

	Sem I	Sem II	Sem III	Sem IV	Status
S.P.I	7.07	8.56	10.00	10.00	Completed
C.P.I	7.07	7.79	8.45	8.81	

Sub X b 16/07/14

Date : 16.07.2014

Deputy Registrar (Academic)

Deputy Registrar (Academic Affairs)



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी
INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

CODE	GRADE POINTS
AA	10 Points
AB	9 "
BB	8 "
BC	7 "
CC	6 "
CD	5 "
DD	4 "
F	0 points and is a FAILURE grade
AU	Audit Course
PP	Pass
NP	Fail
I	Incomplete

LEGENDS USED	
Cr.	Credit
Gr.	Grade
CSE	Computer Science and Engineering
ECE	Electronics and Communication Engineering
EEE	Electronics and Electrical Engineering
ME	Mechanical Engineering
CE	Civil Engineering
DD	Design
BT	Biotechnology
CL	Chemical Engineering
CT	Chemical Science and Technology
EP	Engineering Physics
MC	Mathematics and Computing
CH	Chemistry
EVC	Centre for Environment
ENC	Centre for Energy
NT	Centre for Nanotechnology

No Class or Division is awarded in this Institute.

The Cumulative Performance Index (C.P.I.) is

$$C.P.I. = \sum C_i P_i / \sum C_i \quad \text{Where}$$

C_i is the credit of the course

P_i is the grade point obtained by the student in the course

Verified by: _____



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी

विद्या परिषद की अनुशंसा पर

संगणक विज्ञान एवं अभियांत्रिकी में

प्रौद्योगिकी निष्णात की उपाधि

शुभ्रेन्दु चट्टोपाध्याय

को इस उपाधि के प्रदान हेतु विनियम विहित अपेक्षाएँ जुलाई 2014 में सफलतापूर्वक पूर्ण करने पर प्रदान करता है।

भारतीय गणराज्य के अंतर्गत गुवाहाटी में आज 8 जून 2015 को संस्थान की यह मुद्रा अंकित उपाधि दी गई।

INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

upon the recommendation of the Senate hereby confers the degree of

Master of Technology

in

Computer Science and Engineering

on

Subhrendu Chattopadhyay

who has successfully completed in July 2014, the requirements prescribed under the regulations for the award of this degree.

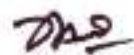
Given this day, under the seal of the Institute at Guwahati in the Republic of India, the 8th day of June, 2015.



निदेशक एवं
अध्यक्ष, विद्या परिषद
Director and
Chairman, Senate



कुलसचिव
Registrar



अध्यक्ष,
शासी मंडल
Chairman
Board of Governors



146101002

भारतीय प्रौद्योगिकी संस्थान गुवाहाटी

विद्या परिषद की अनुशंसा पर

संगणक विज्ञान एवं अभियांत्रिकी में

विद्या वाचस्पति की उपाधि

शुभ्रेन्दु चट्टोपाध्याय

को इस उपाधि के प्रदान हेतु विनियम विहित अपेक्षाएँ अप्रैल 2021 में सफलतापूर्वक पूर्ण करने पर प्रदान करता है।

भारतीय गणराज्य के अंतर्गत गुवाहाटी में आज 16 जुलाई 2021 को संस्थान की यह मुद्रा अंकित उपाधि दी गई।

INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

in

Computer Science and Engineering

on

Subhrendu Chattopadhyay

who has successfully completed in April 2021, the requirements prescribed under the regulations for the award of this degree.

Given this day, under the seal of the Institute at Guwahati in the Republic of India,

the 16th day of July, 2021.

Thesis Title : SDN for Large Scale IoT Networks

निदेशक एवं
अध्यक्षविद्या परिषद,
Director and
Chairman, Senate

कुलसचिव
Registrar

अध्यक्ष,
शासी मंडल
Chairman,
Board of Governors



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी
गुवाहाटी 781039, भारत
Indian Institute of Technology Guwahati
Guwahati 781 039, India

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Fax : +91 361 258 2090
+91-361-260 0762
Email : acad@iitg.ac.in
Web : <https://www.iitg.ac.in/acad>

ACADEMIC AFFAIRS

Date: 10/09/2020

Ref.: Ph.D/CERT/Thesis/146101002



Thesis Submission Certificate

This is to certify that **Subhrendu Chattopadhyay**(Roll No. 146101002) is a Research Scholar in the Department of Computer Science and Engineering of this Institute. The student has submitted PhD thesis entitled “**SDN for Large Scale IoT Networks**” on 03/09/2020. The thesis is now under examination.

D. Sharma
Joint Registrar, Academic Affairs

Joint Registrar (Academic Affairs)
Indian Institute of Technology Guwahati
Guwahati-781039, INDIA



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी

गुवाहाटी - 781 039, भारत

Indian Institute of Technology Guwahati

Guwahati - 781039, India

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+91-361-269 0762
email : acadoff@iitg.ernet.in
web : <http://www.iitg.ernet.in/acad>

ACADEMIC AFFAIRS

Ref.:Ph.D/CERT/Prov/146101002



Date : April 19, 2021

PROVISIONAL CERTIFICATE

This is to certify that **Mr. Subhrendu Chattopadhyay (Roll No. 146101002)**, Research Scholar in the **Computer Science and Engineering** Department of this Institute, has successfully completed the Ph.D. programme of this Institute.

His thesis viva-voce examination was held on **08th April 2021**.

The title of his thesis is: **SDN for Large Scale IoT Networks**.

It is also certified that, as per programme requirement, he also completed comprehensive examination.

The thesis evaluation was done by a pool of examiners including external examiners from India and abroad.

(D. Sharma)

Joint Registrar

Academic Affairs

Joint Registrar (Academic Affairs)
Indian Institute of Technology Guwahati
Guwahati-781039, INDIA



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Date: 10/09/2020

Ref.: Ph.D/CERT/Thesis/146101002



Thesis Submission Certificate

This is to certify that **Subhrendu Chattopadhyay**(Roll No. 146101002) is a Research Scholar in the Department of Computer Science and Engineering of this Institute. The student has submitted PhD thesis entitled “**SDN for Large Scale IoT Networks**” on 03/09/2020. The thesis is now under examination.

D. Sharma

Joint Registrar, Academic Affairs

Joint Registrar (Academic Affairs)
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