Saptarshi Mitra May 14, 1995

saptarshi14mitra@gmail.com • +919038263472 • 556/1,Sarat Bose Road,Subhashnagar, Dum Dum Cantt. Kolkata 700065 • India • Website: mRse7ennit.github.io • LinkedIn

Academic Details

Examination/Degree	University	Year	GPA/%
Bachelor of Technology:			
Electronics & Communication Engineering	NIT Durgapur, India	May, 2017	9.14/10
Higher Secondary Examination	WBCHSE	May, 2013	88.8; Percentile: 99.97
10th Std. Examination	WBBSE	May, 2011	86.5

Test Scores

Name of the Examination	Score	Date
GRE-General Test	316(Quantitative-165, Verbal-151)	27th Nov,2017
TOEFL-iBT	104(Reading-28, Listening-28, Speaking-23, Writing-25)	18th Nov,2016

Publications

- Sayan Sarkar, Gautam Ghosh, Amitrakshar Mohanta, Atreye Ghosh, **Saptarshi Mitra**. Arduino Based Foot Pressure Sensitive Smart Safety System for Industrial Robots, Second IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT 2017)
- Sreetama Sarkar, **Saptarshi Mitra**, Tamoghno Nath and Dr. Sanjay Dhar Roy. *Performanceof Different Power Control Schemes for a Hybrid LTE System with Channel Impairment*, The 2017 International Electrical Engineering Congress(iEECON2017), Thailand
- Anish Pradhan, Soumi Basu, Sreetama Sarkar, **Saptarshi Mitra** and Dr. Sanjay Dhar Roy. *Implementation of Relay Hopper Model for Reliable Communication of IoT Devices in LTE Environment through D2D Link*, 10th International Conference on COMmunication Systems NETworkS(COMSNETS 2018)

Experience

Verizon	Hyderabad, India
Software Engineer	Jun 17 – Present
Network & Technology Group	
TCS Innovation Labs	KOLKATA INDIA

TCS Innovation Labs

Research Intern

KOLKATA, INDIA

May 16 – July 16

Localization of mobile Robots with ROS

Bharat Electronics Limited Hyderabad, India
Intern, Customer Care June 15 – July 15

Project on Electronic Warfare Systems with Emphasis on ESM under A. Ramakrishnan at Hyderbad Facility

Electronics Corporation of India Limited

Kolkata, India

Trainee

Dec 14 – Jan 15

Developed a Project on **Password protected Vehicle Locking System using GSM technology** to remotely alert owner about unusual activities

Academic Projects

'An Analysis of the Cyber-Attacks on Industrial Control Systems and Possible Countermeasures' 2017 with Dr. Anupam Chattopadhyay (NTU, Singapore)

'The Investigation of Power Control Schemes for a Device-to-Device Communication integrated into OFDMA Cellular System'

under Dr. Sanjay Dhar Roy at NIT Durgapur

- Analysis of the performance of different power control schemes(CFOL-DSINRT,CFOL-DFIX,CFOL-DFOL etc)in a hybrid LTE system
- Simulation of CDF with Tx. power and SINR in Matlab
- Introduced Channel impairments(Shadowing,Fading)in simulation

'A Method for Measuring ,Comparing and Correcting Dead-Reckoning Systematic Errors in Mobile Robot' Summer'2016

under Ranjan Dasgupta at TCS Innovation Labs, Kolkata

- To identify the Dead reckoning Systematic and Non-Systematic Errors of Mobile Robots and their sensors
- Performed UMBmark test with FireBird VI to calibrate odometer values and introduce a correction term in wheel base diameter in the dynamic Equation of Differential Drive Robot
- Moved further to different primary sensors so that Robot localization can be achieved more accurately

'Safety System for Robotic Work Environment'

2015-16

The model was designed as a part of General Electric's Edison Challenge 2016 (Team ArdIOT, NIT-Durgapur) and was shortlisted for the final rounds

• A real-time, MEMS sensor (PZT material) based, economical approach with IOT integration to ensure the safety in robotic workspace by shutting the robot system off or slowing it down upon human entry

'Stop Reuse Save Life: A new model of disposable syringe'

2009

participated in IRIS science fair conducted by INTEL corporation ,CII and DST held at Ahmedabad. Won 'Best of Subject Category: Engineering' in INDIA

• Proposed and designed an Injection Syringe which can only be used once and thus it could stop spreading of diseases by reusing

Scholastic Achievement

The EMJMD Student Scholarship(Erasmus+) for the EMECS programme (declined)

2018

EEG based home automation

2016

Idea was to implement home automation through EEG signals to help severely disabled people(e.g. people with ALS). Paper presented at **Festival of Innovation 2016 at Rashtrapati Bhawan.**

Global Initiative Of Academic Networks: International Summer and Winter Term; Special Topics on Robotics at IIT Kharagpur 2015

Selected and attended course on Autonomous and Field Robotics- Micro-Nano-Robotics Manipulation - Medical Robotics

Scheme of Scholarship for College and University Student reg. of Government of India

2013

Got an award on the basis of Higher Secondary Examination held by West Bengal Council of Higher Secondary Education

DST-INSPIRE Internship Science Camp

2011

Selected and Participated at JBNSTS, Kolkata

Department of Science Technology (DST) sponsored INSPIRE award

2010

for academic excellence from 6th to 10th standard

Skills

C , Arduino , MATLAB , Logisim , Angular 5 , C++ , Java , Spring Boot, SQL , ROS , Assembly Level Programming: 8085, 8051, x86 , Atmel Studio , Cadence Virtuoso , Multisim , Raspberry Pi , Keil uVision , Python (Basic) , HTML, CSS , Cadsoft Eagle

Extra Curricular Activities

Volunteer at TEDx Jadavpur University

2018

played an active role in inviting speakers and arranging the event

Chief Events Coordinator of Prakriti - the Environmental club of NIT Durgapur

2016-17

which was involved in activities like organizing plantation programs, observing earth hour, campus cleaning etc.

Google Online Marketing Challenge (GOMC) 2016

2016

 $Partnered\ with\ www.mayallyang.com\ on\ creating\ AdWords\ online\ marketing\ campaign\ for\ their\ expansion\ of\ Ecotourism\ .\ Ranked:\ Good$

DuckDuckGo and Mozilla(l10n,e10s,webVR)

2014-Present

Community member and Active Contributor

Volunteer at Blood Donation Camps organized by State Blood Transfusion Council, West Bengal