

Saptarshi Mitra May 14, 1995

Last update on April 29, 2020

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Academic Details

Examination/Degree	University	Year	GPA/%
Master of Science: <i>Communication Engineering</i>	Technical University of Munich	Oct, 2018-	1,7(German Grade)
Bachelor of Technology: <i>Electronics & Communication Engineering</i>	NIT Durgapur, India	May, 2017	9.14/10(1,5)
Higher Secondary Examination	WBCHSE	May, 2013	88.8; Percentile : 99.97
10th Std. Examination	WBBSE	May, 2011	86.5

Publications

- 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)
- Sreetama Sarkar, **Saptarshi Mitra**, Tamoghno Nath and Dr. Sanjay Dhar Roy. *Performance of Different Power Control Schemes for a Hybrid LTE System with Channel Impairment*, The 2017 International Electrical Engineering Congress(iEECON2017), Thailand
- 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)

Experience

Intel Working Student Intel Architecture, Graphics and Software (IAGS)	MUNICH, GERMANY Oct '19 – Present
Intel Internship Worked with Digital Design Verification team (Modem Technology Group) for next generation modems.	MUNICH, GERMANY March '19 – Sep '19
Verizon Software Engineer Network & Technology Group	HYDERABAD, INDIA Jun '17 – July '18
TCS Innovation Labs Research Intern Localization of mobile Robots with ROS	KOLKATA, INDIA May '16 – July '16
Electronics Corporation of India Limited Trainee Developed a Project on Password protected Vehicle Locking System using GSM technology to remotely alert owner about unusual activities	KOLKATA, INDIA Dec '14 – Jan '15

Academic Projects

- '**Hardware-Oriented Implementation of IDEA in Spartan-3e FPGA**' Oct '18-present
 - Used VHDL to implement and simulate the International Data Encryption Algorithm.
 - Implemented Resource Constrained Scheduling for optimum resource utilization
- '**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**' 2016-17
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

Deutschlandstipendium, German National Scholarship Program for academic excellence, TUM 2018-20

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 , Python , VHDL , Verilog , SystemVerilog , UVM , VCS, Arduino , MATLAB , LaTeX, Logisim , Angular 5 , C++ , Java , Spring Boot, SQL , ROS , Assembly Level Programming, GDB , Atmel Studio , Cadence Virtuoso , Multisim , Keil uVision, HTML, CSS , Cadsoft Eagle

Extra Curricular Activities

Volunteer at Ronald McDonald House Charities on behalf of Intel Involved program 2019-present

Semester Representative and Member of Quality Circle, MSCE, TUM 2018-present

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(I10n,e10s,webVR) 2014-Present

Community member and Active Contributor

Volunteer at Blood Donation Camps organized by State Blood Transfusion Council, West Bengal 2014