

# Saptarshi Mitra May 14, 1995

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

## Academic Details

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

## Test Scores

Name of the Examination	Score	Date
Test of English as a Foreign Language: TOEFL-iBT	104 (Reading-28,Listening-28,Speaking-23,Writing-25)	18th Nov,2016

## Publications

Paper presented : 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)

Paper presented :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

## Experience

<b>Verizon</b> Software Engineer Network & Technology Group	HYDERABAD, INDIA Jun '17 – Present
<b>TCS Innovation Labs</b> Research Intern Localization of mobile Robots with ROS	KOLKATA, INDIA May '16 – July '16
<b>IIT Kharagpur</b> Course Attendee Global Initiative Of Academic Networks:International Summer and Winter Term Special Topics on Robotics : Autonomous and Field Robotics- Micro-Nano-Robotics Manipulation - Medical Robotics	KHARAGPUR, INDIA Dec '15
<b>Bharat Electronics Limited</b> Intern,Customer Care Project on Electronic Warfare Systems with Emphasis on ESM under A. Ramakrishnan at Hyderabad Facility	HYDERABAD, INDIA June '15 – July'15
<b>Electronics Corporation of India Limited</b> Trainee Developed a Project on Embedded systems Password protected Vehicle Locking System using GSM technology with ATmega8	KOLKATA, INDIA Dec '14 – Jan '15

## Academic Projects

- '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

**'Embedded systems : Password protected Vehicle Locking System using GSM technology'** 2014-15

conducted by Electronics Corporation of India Limited

- Designed a security system for vehicle against theft with Atmega8a microcontroller
- Used GSM technology to remotely alert owner about unusual activities

**'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 stopped spreading of diseases by reusing

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## Scholastic Achievement

**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.**

**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

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## Skills

C , Arduino , MATLAB , Multisim , C++ , ROS , Assembly Level Programming: 8085, 8051, x86 , Atmel Studio , Cadence Virtuoso , Raspberry Pi , Keil uVision , Python (Basic) , HTML , Pspice , Cadsoft Eagle

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## Extra Curricular Activities

**Google Online Marketing Challenge (GOMC) 2016** 2016

Partnered with [www.mayallyang.com](http://www.mayallyang.com) on creating AdWords online marketing campaign for their expansion of Ecotourism . Ranked : Good

**Quizzing** ; Won contests in college and outside

**ABHIVYAKTI(Paper Presentation Event) and TC/DC Circuit Design Event** 2016

Consecutive Winner at AAROHAN 2016 and 2017,Techno-Management Fest,NIT Durgapur

**DuckDuckGo and Mozilla(l10n,e10s,webVR)** 2014-Present

Community member and Active Contributor