Nived Rajaraman | EE14B040
Indian Institute of Technology Madras

EDUCATION

Program	Institution	%/CGPA	Year of completion
Dual Degree in Electrical Engineering	Indian Institute of Technology Madras, Chennai	8.24	2019
XII	Sri Chaithanya Junior College	96.7	2014
X	Delhi Public School, Hyderabad	10.0	2012

SCHOLASTIC ACHIEVEMENTS

- KVPY Rank – 148 – In **top 1%** percentile
- EAMCET Rank – 46 – In **top 0.1%** percentile
- Selected for Indian National Astronomy Olympiad (INAO) – **top 300**

COURSE WORK AND SKILLS

- Digital Signal Processing
- Control Systems*
- Microprocessors Laboratory*
- Computer Organization
- Python Lab (Python and advanced C)
- Digital Systems
- Probability
- C++
- MATLAB
- Blender
- Adobe Photoshop

PROFESSIONAL EXPERIENCE & PROJECTS

Centre for Excellence in Wireless Technology (CEWiT), Research Park, IIT Madras   *(May – July, 2016)*
- Developed a module in C and an equivalent MATLAB model for **channel estimation and equalization** in LTE, for integration with transmit and receive chains being developed by CEWiT on Texas Instruments EvMs
- Accounts for the effects of **multipath distortion**, **Doppler Effect**, **Inter-Symbol** and **Inter-Carrier Interference**
- Initiated into a low-level picture of LTE architecture and communication systems design
- Writing a paper discussing the results of the chosen approach and future directions for research (in progress)

Team AUV Amogh, Centre for Innovation, IIT Madras   *(October, 2015 – present)*
- Working in a team of **20** to design an Autonomous Underwater Vehicle for NIOT SAVe competition
- Designing a dynamic **shared-memory** based mission controller module that interfaces the motherboard with various blocks: microcontrollers, an Inertial Measurement Unit (IMU) and pressure sensor via SPI
- Focus of implementation on transparent data-logging and ability to interface the AUV with a *separate* simulator

Magnetic Levitation, Physics Club, Centre for Innovation, IIT Madras   *(February – August, 2015)*
- Developed a magnetic levitation system designed to levitate a magnet of fixed dimensions and weight
- Implementation via a **PID feedback controller** to regulate the position of the levitated magnet
- The driving microcontroller used is Arduino Uno while position location is done using Hall Effect sensors

POSITIONS OF RESPONSIBILITY

Hostel Manager, International and Alumni Relations, IIT Madras   *(May, 2016 – present)*
- Networking with alumni for raising funding for hostel expenditure and organization of hostel-level reunions
- Handle a budget of ~ ₹ 8L for the hostel alongside hostel secretaries, raised partly through alumni funding

Outreach Coordinator, Electrical Engineering Association (EEA)   *(May, 2016 – present)*
- Handling content generation for online and on-ground PR for the Electrical Engineering Association
- Taking care of design and creative requirements for the first edition of EEAFest

Correspondent, The Fifth Estate (T5E)   *(September, 2015 – April, 2016)*
- Journalist for IITM's student news body, "The Fifth Estate"

EXTRA-CURRICULAR ACTIVITIES

- Mentored underprivileged girl students via CBSE's **UDAAN initiative** through a series of video lessons
- Volunteered for NSS's **"Education via Blogging"** initiative for generating content on grades 11 and 12 syllabus
- Passionate for drumming with interest in game design