# Education / Coursework

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| (18-461/661) Intro to Machine Learning For ECE(Graduate)  (15-410) Operating System Design And Implementation |
| (15-351) Algorithms and Advanced Data Structures  (18-491) Digital Signal Processing |
| (18-370) Fundamentals Of Control |

* Student at Carnegie Mellon University.
* Teaching Assistant at Carnegie Mellon University.
* B.S. In ECE | May 2020
* M.S. In ECE | May 2021
* Dean’s List Spring 2018

# Work

* **CMU Dept. Of ECE | (Graduate) Introduction To Machine Learning Teaching Assistant | Spring 2020**

Taught graduate students fundamental machine learning techniques such as Linear Regression, Naïve Bayes, Logistic Regression, Multiclass Classification, SVMs, Nearest Neighbors, Decision Trees, Ensemble Methods, Neural Networks, Clustering, PCA, Online Learning, and Reinforcement Learning.

* **General Motors | Embedded Controls Intern | Stability Of Vehicle | Summer of 2019**

Applied control theory concepts to design a brake system for a trailer. The system included ABS and ESC safety features. The system detected the sway of a trailer in real time and dampened sway oscillations by engaging the brakes appropriately. This will prevent trailer accidents and save lives.

* **CMU Dept. Of ECE | Signals Researcher | Ultrasonic Positioning Systems | Summer of 2018**

Worked with Professor Sankaranarayanan on close range ultrasonic positioning systems for blind person navigation. Chirps, STFTs, and FFTs are some of the DSP concepts used to implement the system.

* **CMU ISR | Software Researcher | Automatic Program Repair | Summer of 2017**

Data mined GitHub repository bugs and contributed this data into existing SQL databases to be used for automatic program repair. Analyzed this data in R to verify coding practices which contribute to projects with less errors.

# Skills

* Python | MATLAB | C | C# | Java | MySQL | JS | PHP | React | AWS | Azure | Heroku | NetLogo | Scheme

# Projects

* **Software For Social Good :** Founded Common Core Free (Inc.) Partnered With Professor Kosbie (CS) and Professor Stehlic (CS). Common Core Free is a software that provides individually leveled math material for a classroom of students. Print the materials with one click. Common Core Free uses reinforcement learning to learn the optimal pace to progress each student.

**Track And Field Achievements:**

* Ran the 46th fastest indoor 300m time in the U.S.A. (35.16 Fully Automatic Time) (Stuyvesant Greyducks, 2016)