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EDUCATION

Master of Science in Mechanical Engineering

Aug 2018 - May 2020

Bachelor of Science in Mechanical Engineering & Physics

Aug 2013 - June 2017

Massachusetts Institute of Technology (MIT), Cambridge, MA

Relevant Coursework - Product Design and Development; Global Engineering, Management in Engineering, Large and Complex Systems Design, Fundamentals of Precision Design, Mechanics and Materials I & II, Controls and Dynamics I&II, Design and Manufacturing I & II

Thesis: On The Use of Prior Knowledge in Deep Learning

EXPERIENCE

Research Assistant, Research Associate - MIT 3D Optics Group

2017 - 2020

Teaching Assistant (Controls and Dynamics II Class)

2019 - 2020

Department of Mechanical Engineering, MIT, Cambridge, MA

- Designed and built electronic, computational and optical setups for experimentation
- Designed and implemented AI algorithms in both supervised and unsupervised tasks
- Involved in several publications on the use of machine learning for imaging problems

Treasurer, Mentor

2018 - 2020

MakerWorkshop (Machine Shop), MIT, Cambridge

- Maintained and trained users on the mill
- Managed finances, and made procurements for the machine shop

Project Leader, Volunteer

2013-2017

Next Big Thing, Student Group Project, MIT

- Designed a 16ft. tall see-saw and scaffold, complying with MIT EHS and Cambridge City guidelines
- Led the construction and operation of the see-saw; involved in several previous construction projects

Student Researcher

Mechatronics Lab, Department of Mechanical Engineering, MIT

Summer 2016

TESS, MIT Kavli Institute for Astrophysics and Space Research

Summer 2015

- Worked on design improvements of pipe inspection robot; refined design through iteration and testing
- Assembled robot components for a proof-of-concept model
- Worked with the instrumentation team on CCD quality testing
- Wrote scripts for data timing diagram generation

Intern

2011-2013

Star Television, Accra

- Facilitated the development of content for kid's TV channel and updated and maintained website

SKILLS AND INTERESTS

Software: CAD (solidworks, etc), Modelling (Blender), CAM (MasterCAM, etc) Programming (Python, MATLAB etc)

Hardware: Prototyping, Machining (Manual, CNC), Electronics (General, Microcontroller, etc)

Areas of Interest: Electronics and Machining Projects; Engineering Consulting; Robotics; Mechanical & Systems Design; Deep Learning in Engineering