

1539 Cambridge St
Cambridge MA 02139
USA
+1 617 600 6842

Kwabena K. Arthur
kwabenaarthur.com
kkarthur@mit.edu

15 Flimwell Close
Bromley BR1 4NB
United Kingdom
+44 757 282 4499

EDUCATION

Master of Science in Mechanical Engineering **2018 - 2020**
Bachelor of Science in Mechanical Engineering & Physics **2013 - 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, Machine Learning, Optics
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 hardware for experimentation
- Designed and implemented AI algorithms in both supervised and unsupervised tasks
- Involved in several publications on the use of machine learning for computation imaging

Treasurer, Mentor **2018 - 2020**
MakerWorkshop (Machine Shop), MIT, Cambridge

- Maintained and trained users on the mill
- Managed finances and operating budget of the machine shop

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

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

Intern
Star Television, Accra **2011-2013**

- Facilitated the development of content for kid's TV channel 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: Mechanical Design; Robotics; Systems Design; Electronics; Engineering Consulting; Manufacturing; Machine Learning; Computational Imaging;