KATANA RAIN FINLASON

katanaf@mit.edu
229 Vassar Street,
Cambridge, MA 02139
(857) 210-4021

Skills

- CAD/CAM (SolidWorks and Fusion 360)
- Machining and experience using power tools
- Trained in Matlab and Excel
- Rapid prototyping experience
- Artistically inclined

Education

September 2019 - Present

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (M.I.T.) Class of 2023
Candidate for B.S. in 2A Mechanical Engineering, GPA 4.9/5.0

- ➔ Concentration in Industrial Design with a minor in Energy Studies.
- ➔ Relevant coursework: Mechanics and Materials I, Numerical Computation, Mechanical Engineering Tools, Dynamics and Control I, Design and Manufacturing I&II, Toy Product Design, Calculus I&II, Differential Equations, Classical Mechanics, Electromagnetism/Electrostatics, Science Writing for the Public, Thermal-Fluids Engineering I, Measurement and Instrumentation, Electronics for Mechanical Systems, Earth Science, Energy Economics & Policy

Job Experience

September 2022 - Present

MIT Laboratory for Manufacturing and Productivity (Cambridge, Massachusetts)
Lab assistant

- ➔ Currently working in a Mechanical Engineering Lab called the 'LMP'. My duties include helping students navigate the class Design and Manufacturing II and working closely with course staff to improve the structure of the class.

June 2022 - September 2022

MIT CADLab UROP (Cambridge, Massachusetts)
Undergraduate Researcher

- ➔ Designed and built the housing and optical fluidics system for a digital holographic microscope. Gained more experience in 3D printing techniques and laser cutting.

February 2022 - May 2022

MIT Pappalardo Lab (Cambridge, Massachusetts)
Undergraduate Apprentice/Mentor for the class Design and Manufacturing I

- ➔ Worked in the Mechanical Engineering Lab 'Pappalardo'. My duties included assisting students with their robot construction and giving them advice on the best fabrication techniques. Machined my own fully-functioning Stirling engine.

June 2021 - August 2021

Mechanical Engineering UROP at MIT Sea Grant (remote)
Undergraduate Researcher

- ➔ Studied the effects of rising CO2 levels on ocean acidification and ultimately the impact it would have on calcifying organisms, such as mollusks, in the New England area. Conducted a meta analysis by collecting data, making database entries and performing the necessary calculations.

February 2021 - May 2021

Department of Biology at MIT (Cambridge, Massachusetts)
Introductory Biology Teaching Assistant

- ➔ Organized and taught lessons to my own recitation section. Created exams and worksheets with course staff.

June 2020 - October 2020

AIM Educational Services (Kingston, Jamaica)
SAT Mathematics Teaching Assistant

- ➔ Created lesson plans, taught virtually over Zoom, and wrote reports.

Awards

- ➔ Valedictorian of the top All Girls High School in Jamaica (2017)
- ➔ Received Principal's Honor Roll (2019)
- ➔ Placed nationally (Jamaica) and regionally (Caribbean) in CSEC and CAPE examinations (2017-2019)
- ➔ Good Citizenship Award (7 years in a row)

Leadership Experience

September 2015 - June 2019

Prefect Council (student government), Immaculate Conception High School
Deputy Headgirl

- ➔ Coordinated school events with the Administrative Staff as well as the Home School Association and gained experience in public speaking.

September 2014 - June 2019

Science Environment Technology and Health Club, Immaculate Conception High School
President

- ➔ In charge of lab maintenance and experimental setups.

September 2012 - June 2019

Lawn Tennis Team, Immaculate Conception High School
Captain

- ➔ Organized training and worked well in a team setting.