

S. Violet Killy

portfolio: violetkilly.com

Education

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Bachelor of Science in Mechanical Engineering with Concentration in Robotics | GPA: 4.9/5.0

2016-2020

- *Relevant Coursework:* Product Engineering Processes, Bio-inspired Robotics, Artificial Intelligence, Design and Manufacturing, Mechanics and Materials, Dynamics and Control, Thermal Fluids Engineering, Numerical Computation, Electronics for Mechanical Systems, Fundamentals of Programming, Instrumentation and Measurement

Experience

Sistine Solar

Somerville, MA

Product Design Intern

May 2019 – Aug 2019

- Fabricated and scaled up a novel mechanical device used to apply a patented technology (SolarSkin) that makes solar panels blend in with roofing tiles
- Analyzed and redesigned the current SolarSkin installation process to maximize convenience, accuracy, and efficiency
- Organized a bill of materials for the applicator device and conducted cost benefit analysis of manufacturing options

MIT Media Lab: Affective Computing Group

Cambridge, MA

Undergraduate Researcher

June 2017 – Sep 2018

- Engineered Cube Puzzles: a tangible platform that tracks the placement and orientation of colored wooden blocks, specifically targeted at individuals with neurodevelopmental differences including autism and ADHD
- Designed and machined a wooden housing for the embedded electronics
- Assembled printed circuit boards and integrated them into the system, enabling collection of real-time data
- Created a comprehensive infographic using Adobe Illustrator and collaborated on an academic paper

Makeosity Digital

New York, NY

Co-founder and Game Developer

June 2015 – May 2017

- Developed an experiential learning game to teach kids engineering concepts and CAD skills using Autodesk software
- Modeled and animated the game environment in Blender and wrote related scripts using the Unity development platform
- Represented company at outreach events, including Singularity's Exponential Manufacturing Conference
- Presented the beta version of the product to the VPs of Autodesk's Education Experience division

Leadership

Gordon-MIT Engineering Leadership Program

Cambridge, MA

Gordon Engineering Leader

Sep 2018 - present

- Developing leadership, teamwork, and communication skills in a selective leader development program
- Engaging in scenario-based practice of professional engineering leadership skills in preparation for industry engineering contexts all complementing MIT's technical coursework
- Overseeing 9 seniors and 50 juniors as they navigate the program

Skills and Interests

- *Software and Programming:* SolidWorks, Fusion360, Arduino, Python, MATLAB, Java, Blender
- *Electronics and Machining:* Soldering, 3D printing, Injection Molding, Thermoforming, CNC Milling, General Machining

Honors

- Rhodes Scholarship Finalist
- Pi Tau Sigma (International Mechanical Engineering Honors Society)

MIT Activities

- MIT Varsity Fencing: Dedicating 10+ hours per week while balancing a full academic course load
- MIT Global Teaching Labs: Taught physics, math, and programming to students in Hamburg, Germany
- MIT MakerLodge: Supervised freshmen 4 hours per week in a makerspace and taught basic shop safety skills
- MIT FEMME (Female Empowerment Meets Mechanical Engineering)
- Lab Assistant for *Electronics for Mechanical Systems* course