

MOSES SWAI

www.mosesswai.com

EDUCATION

08/2014 - present

Stanford University, Stanford, CA

M.S. in **Mechanical Engineering**, to be conferred in December 2020. **GPA: 3.8**

B.S. in **Mechanical Engineering**, conferred in June 2018.

WORK EXPERIENCE AND PROJECTS

06/2020 - 09/2020

X, the moonshot factory - Robotics Intern, Mountain View, CA

- Explored concepts to extend robot functionality through cross functional collaboration
- Considered coverage of various sensors and their integration into robot functionality
- Performed analysis to understand actuator limitation on technical requirements
- Designed and built prototypes for early testing of various solution paths

07/2019 - 09/2019

Tesla, Inc. - Mechanical Design Engineering Intern, Palo Alto, CA

- Redesigned busbar variants to carry more power within thermal and spatial compliance.
- Performed stress analysis and FEA simulation on connector socket setup to determine failure zone and improve safety factor.
- Prototyped an injection moldable dock to be used for initial docking tests of a charging handle variant.

01/2019 - 06/2019

Google LLC - Mechanical Engineering Intern, Mountain View, CA

- Designed and built a thermal test vehicle to investigate the thermal performance of a laptop architecture and validate simulation results.

09/2018 - 12/2018

iRobot Corporation - Mechanical Engineering Intern, Bedford, MA

- Conceptualized, designed, fabricated and performed testing on fixtures for various robot sub-assemblies and full prototypes.
- Completed design and prototyping projects involving additive manufacturing and plastic molding in order to validate design proposals and improve assembly.

06/2017 - 08/2017

GlassPoint Solar, Inc. - Mechanical Engineering Intern, Fremont, CA

- Assisted engineers in design, fabrication, assembly, test and modification of prototype mechanical systems, measurement tools and test equipment.
- Devised a scale model prototype to test a process automation that would save its completion time by more than 70%.

LEADERSHIP EXPERIENCE

09/2016 - 06/2018

Technical Communication Program - Public Speaking Tutor, Stanford University, CA

- Tutored students on strategies for effective public speaking. Content covered delivery, organization, visual aids, interviewing skills, persuasive pitches and technical speeches.

06/2017 - 06/2018

Stanford Africa Entrepreneurship Network - President, Stanford University, CA

- Forged and strengthened relationships between students and mentors with entrepreneurial experience in developing countries.

TECHNICAL SKILLS

- **Engineering:** CAD (SolidWorks, Creo, NX, CATIA), Manufacturing, Additive Manufacturing, Mechatronics, Prototyping, Heat Transfer, FEA, FMEA, Controls, Vehicle Dynamics,
- **Programming:** Python, C/C++, Java, MATLAB