## **Helene Willits**

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#### **EDUCATION**

Graduating June 2022 Relevant Coursework: Object Oriented Programming, Data Structures, Computer Organization, Systems Programming, Discrete Structures, Computer Architecture Pursuing a Computer Science B.S. Undergraduate Degree Cal Poly San Luis Obispo, CA

Significant Projects: Parallel Processing Matrix Multiplication, Thumb Simulator

### **WORK EXPERIENCE**

Programming Languages: Python, Java, C

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0 0 Summer 2019

Building Controls Intern – ACCO Engineered Systems

- Designed network architectures, programmed controls logic, and organized user interface for all of the heating and air conditioning (HVAC) automated machinery on 3 major commercial projects
  - Developed controls equipment documentation for over 30 commercial projects
- Designed machine room layouts and calculated statistics for an emergency water supply project

Private Tutor – Self Employed

Tutor math through Calculus III and accommodate individual learning impairments, styles, abilities

#### **PROJECTS**

SLO Hacks – Major League Hacking

March 2020

- Used Java and Android studio to design and code an app that allows users to wage bets against themselves and their friends to help increase their productivity and accountability
- Designed the app's architecture and coded features that allowed users to create and manage their challenges 0
  - Coded frontend features that allowed users to manage their current challenges and navigate between pages

2018 - 2019

Society of Women Engineers: Team Tech with Boeing

- Placed 3<sup>rd</sup> at SWE National Conference, 2019
- Designed and prototyped a stowable treadmill to prevent blood clots in passengers with Deep Vein Thrombosis 0
  - Research Lead: Analyzed and reported on the economic, health, and other impacts of the product, as well as organized the research team and ensured that deadlines were met with excellent deliverables 0
    - Presented to our Boeing mentor team in a research presentation, design review, and prototype review and implemented mentor advice into our future design

AthenaHacks – Major League Hacking

Used Java with Android Studio to design and code a user-friendly app that documents travel locations, participants, and event memos in a 24 hour Hackathon

Cal Poly Racing: Formula SAE Aerodynamics Team

2018 - 2019

- Helped team leaders build scripts for computational fluid dynamics simulations in STAR-CCM+ that increased team efficiency and obtained more comprehensive flow analysis over the entire car structure
  - Manufactured and tested components of the rear wing, throttle stops, and suspension links

# **EXTRACURRICULAR ACTIVITES**

2018 - Present

Encourage young girls in my community to explore and pursue engineering

Society of Women Engineers: Community Outreach

# **AWARDS AND NOMINATIONS**

Fall 2018, Winter 2019, Winter 2020 Fall 2018 Individual Recognition Award Recipient – Team Tech with Boeing

Selected to represent a UCI Robotics Camp at the 2017 Wonder Women in Tech Conference

2017

## **SKILLS AND CHARACTERISTICS**

Effective Communication, Positive Attitude, Focused Work Ethic