

# Samuel Witte

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## EDUCATION

UNIVERSITY OF IOWA - IOWA CITY, IA

BSE Electrical Engineering

Aug 2020 - Present

Computer Focus   Focus Area of Computer Hardware   Anticipated Graduation Spring 2025

## EXPERIENCE

**ELECTRICAL DESIGN INTERN, SSC ENGINEERING, INC.**

Chesterfield, MO

Dec 2021 - Jan 2022, May 2022 - Aug 2022

- Programmed and maintained internally used automation scripts written in Python and PowerShell to save over 40 hours monthly; deployed across systems company-wide using external script deployment software
- Designed electrical layouts for commercial buildings with Revit and AutoCAD to address daily client specifications
- Enabled teams of up to 4 to complete individualized work, followed by whole-team validation to ensure quality and execution of our services

## PROJECTS

HPR Flight Computer   Makes and records measurements in-flight for analysis post-flight using an RP2040 microcontroller interfaced with sensors via I2C and SPI. Developed and assembled custom PCB. Made for personal interest and use in HPR rockets for rocketry club. Practiced BOM management, version control, and collaborating with others

Cryptocurrency Counter   Uses Python to make real-time estimates on cryptocurrency balance utilizing APIs and a Raspberry Pi Zero. Built to monitor personal balance without checking external websites and to experiment with 7-segment displays

Custom Mechanical Keyboard   Uniquely-shaped keyboard PCB designed with KiCad. Plate and case modeled with Fusion 360. Created out of personal interest and to learn and practice CAD and EDA software

## LEADERSHIP EXPERIENCE

President - AIAA University of Iowa Chapter

May 2022 - Present

- Organized, coordinated, and prepared material for weekly meetings, events, and competitions
- Allocated tasks to other exec members

Executive Assistant - AIAA University of Iowa Chapter

Aug 2021 - May 2022

- Project lead for a competition rocket, which included design modifications and assembly
- Assisted president with logistics and weekly meeting plans

## SKILLS

Python   Verilog   KiCad EDA   Fusion 360   Powershell  
Github   SMD & Through-hole Soldering   Revit and AutoCAD   Slack/Teams   Excel/Microsoft Suite

## RELEVANT COURSEWORK

Computers in Engineering   Discrete Structures   Introduction to Numerical Methods  
Intro to Digital Design   Principles of Electronic Instrumentation   Electrical Circuits  
EM Theory   Physics IV (Intro to Modern/Quantum)   Linear Systems I