WILLIAM J. SHULTZ

william.shultz2017@gmail.com | github.com/ShultzWilliam | linkedin.com/in/wilshultz/

EDUCATION

Bachelor of Science (B.S) in Computer Science and Engineering

The University of Toledo, Toledo, Ohio
August 2017 – December 2021

- Cumulative GPA: 3.67
- Honors and Awards: Magna Cum Laude, Lambda Sigma Honor's Society, Levis Leadership Award
- Relevant Coursework: Object-Oriented Programming, Data Structures, Software Engineering, Artificial Neural Networks, Cybersecurity, Hardware Assurance and Trust, Engineering Statistics

WORK EXPERIENCE

Undergraduate Researcher, Hardware Oriented Security & Trust Research Lab

The University of Toledo, Toledo, Ohio
May 2021 – August 2021

- Contributed to a $30 million project funded by the U.S. Air Force Research Lab, titled "Assured Digital Microelectronics Education and Training Ecosystem"
- Studied Hardware Trojans, Physical Unclonable Functions (PUFs) with Field Programmable Gate Arrays
- Hosted a microelectronics workshop for high-school students on Hardware Security

Software Development Co-op, .NET Development

Precision Castparts Corporation, Mentor, OH
May 2020 – August 2020

- Created and maintained custom software applications for use in a fast-paced, manufacturing environment using C#, MySQL, and HTML/CSS
- Implemented employee work-hour reporter, comparing employee worktimes to average part development times, decreasing product development times by up to 1-5% per part
- Developed effective communication within a team-based ecosystem during the COVID Pandemic

Undergraduate Researcher, Photovoltaics Innovation and Commercialization

The University of Toledo, Toledo, Ohio
May 2019 – August 2019

- Developed a method for calculating reflections off solar arrays using Python, numPy, Pandas, Anaconda
- Had research presented at IEEE's 47th Photovoltaic Specialist Conference, published in September 2020

PROJECTS

Facial Recognition Application (Python)

- Created a console application which recognized faces based off a custom database
- Applied knowledge on Convolutional Neural Networks, facial detection, and feature extraction

Air 3550 Airline Manager Application (C#, Excel)

- Desktop application used to search and purchase flight tickets, as well as manage the airline system
- Users can create accounts, buy and refund plane tickets, and use reward points for purchasing flights

ADDITIONAL SKILLS

- Programming Languages: Python, C#, SQL, Java, VHDL, C/C++, HTML, CSS, JavaScript
- Software: Visual Studio, Visual Studio Code, Bash, Virtual Box, Docker, Vim, Git, GitHub, GitKraken, Anaconda
- Operating Systems: Windows, Linux, MacOS
- Additional Skills: experience with web-development, proficiency in Spanish and Japanese, proofreading research, root-cause analysis, technical documentation, experience using Agile SDLCs