Samuel Johnson

samueljohnson2018@gmail.com | (484) 905-2474 | Coatesville, PA
linkedin.com/in/s-d-johnson | github.com/SamuelJohnson2022 | sam.johnson-clan.us

PROFESSIONAL EXPERIENCE

Lockheed Martin, Moorestown, NJ - ***Associate Software Engineer*** **Jan. 2022 - Present**

- Develop and maintain interfaces on the Aegis Weapons System, using the **Model-View-Controller architecture**.
- Utilize **Java Swing** for the frontend GUI, **MySQL** for the backend database, and Data Distribution Service (DDS) messaging protocol for client/server communication.
- Conduct level one **unit testing** with Java libraries **JUnit and Mockito**, achieving at least 80% branch coverage.
- Perform **acceptance testing** using **Python** and **Robot Framework** to ensure client requirements are fulfilled.
- **Identify defects** in the code and verify proper feature implementations during **integration testing.**
- Participate in an **agile development cycle** involving daily standup, sprint planning, and sprint retros.

CSCP

- Modernized a legacy communication library including **automated testing and deployment** using a **Jenkins** pipeline job.
- Transformed the manual Automake build process into an all-in-one **Maven** compilation, packaging, and deployment build.

RHEL8 Transition

- Carried out the team's transition from our software running on a 32-bit operating system to a 64-bit one.
- Recompiled a wide range of 10+ products, including those written in **C, C++, and Java**.

Asynchronous Messaging

- Designed a new messaging interface that allowed for asynchronous handling of GUI events.
- Created new automation tools in our **Robot Framework** and **Python-based** simulation environment to test the functionality.

EDUCATION

The Pennsylvania State University, University Park **2018 - 2021**

Bachelor of Science in Computer Engineering | GPA: **3.94** | Magna Cum Laude | Class of 1922 Memorial Scholarship

- **Relevant Coursework:** Data Structures and Algorithms, Operating Systems, Computer Organization and Design, App Development, Signal Processing, Computer Networking, Computer Vision

RELEVANT SKILLS

Programming Languages

- Python, Java, C, Swift, C#, MySQL, HTML/CSS, Assembly

Software Processes/Tools

- Git, Linux, Jenkins, Atlassian Tools, Agile Methodologies, DevOps, OOP, MVC

PROJECTS **2021**

AI Tuft Analysis [C#/Unity] - Designed a **software process** that takes in video data of tuft testing and maps it to the UV coordinates of a 3D model. Managed the project as the **lead engineer** and worked on 3D reconstruction and UV mapping in **Unity**. We placed 3rd overall out of 72 teams in Penn State's capstone showcase. sites.psu.edu/lfshowcasefa21/2021/12/09/ai-ml-tuft-data-processing/

Call Stats [Python] – Developed a **discord bot** to observe activity on a voice channel and provide users with statistics about call length, number of participants, etc. Used the **discord API** to collect data and **Plotly** to create a Gantt chart that showcases it. sam.johnson-clan.us/project-pages/discord-stats.html

2019-2020

DevPSU Startup [Python/PHP] – Created a **web app** to match Penn State students to clubs and activities based on their interests and affinities. **Led a team of five** Penn State students through the proposal, prototype, and presentation phases of the Nittany AI Challenge. Secured a funding grant to **build out a Minimum Viable Product** and **presented it to a team of corporate representatives**. sam.johnson-clan.us/project-pages/club-matching-tool.html