Selena C Hamilton

Aberdeen, MD (202)459-8233 Selena.C.Hamilton@outlook.com

EDUCATION

Towson University (anticipated graduation Dec 2025)

Bachelor Degree in Computer Science.

• 3.75 GPA

Harford Community College (graduated May 2023)

Associate Degree in Computer Science..

• 3.62 GPA

WORK EXPERIENCE

Energetics Technology Center Intern (January 2022 – Present)

Robotics Research and Collaboration Campus Aberdeen Proving Ground (APG)

<u>Developed Power App</u> <u>applications</u> to track resource usage and researcher access, including onsite scheduling and permissions.

- Develop and implement Power App applications for resource tracking and management.
- Monitor researcher usage of resources and maintain detailed records.
- Manage onsite access schedules and permissions for researchers.
- Ensure data accuracy and accessibility through customized Power App dashboards.

Part of team responsible for providing collaboration, data management and analysis for robotic experiments.

- Develop user guides for building Husky ROS systems from scratch.
- Develop demonstration kits for Robotic STEM workshops.

VR Simulation Development Intern (June 2024 – August 2024)

Chemical Biological Center Aberdeen Proving Ground (APG)

<u>Updated and enhanced military VR training simulations by updating said simulations from Unity 2017 to Unity 2024, while documenting the process.</u>

- Updated VR proof of concept simulations for military training(drone operation and digital twin technology).
- Upgraded simulation program from Unity 2017 to Unity 2022, improving capabilities.
- Provided detailed and up to date documentation for future developers.

Navigate the Future (NTF) (June 2022, June 2023, June 2024)

American Indian Higher Education Consortium 121 Oronoco Street, Alexandria, VA 22314

<u>Taught students at Whitehorse High School in Utah, basic computer science skills while creating connections and informing them of the various opportunities available for them through the program.</u>

- Created a weeklong curriculum with an emphasis on problem solving, game, and robotic creation.
- Taught computer science skills to 24+ students, leading them to create their own basic games in Scratch.
- Introduced robotic fundamentals and the engineering design process to 12+ students using Lego Spike Prime, culminating in a sumobot tournament.

Army Educational Outreach Program (AEOP) (June 2022 – September 2022)

University of Maryland | 4130 Campus Drive, 0201 Hornbake Library University of Maryland, College Park, MD 20742-4345

Aided in the creation of a platform with the intent of gathering data from volunteers to better understand the benefits of an Al companion for intelligence analysts using a simulation.

- Created content for the simulation, such as red herrings for volunteers to sort through either on their own or using the help of AI.
- Completed CITI human subjects research training
- Aided in creating a Python program that will sort through data received from the experiment and display it in a way that is easy to understand.

Near Peer Mentor (June 2021 - July 2021)

U.S. Army Combat Capabilities Development Command (CCDC) Army Research Laboratory (ARL) | Aberdeen Proving Ground (APG), MD 21005

Mentor students from 5^{th} through 12^{th} grade in the Python Coding language, as well as create and maintain presentations and kits made to aid in the learning and understanding of students.

- Prepared lessons and activities for 25+ students
- Mentored students and provided aid in their projects

Science and Engineering Apprenticeship Program (SEAP) Intern (August 2020 – February 2021)

U.S. Army CCDC ARL

(ARL), DoD High Performance Modernization Program | APG, MD 21005

Responsible for developing a VR environment to be utilized in outreach demonstrations to show the capability of STEM fields to younger generations. Along with this I coordinated the sorting and visualization of complex data.

- Generated CAD (Computer Aided Design) models utilized in the Unity Engine.
- Developed presentations and briefed leadership on strategic plans of action, implementation and execution.
- Developed strong understanding of Cyber Safety (Completed the Cyber Awareness Challenge 2020)
- Work Published in the June 2021 issue of "The ITEA Journal of Test and Evaluation".

Gains in the Education of Mathematics and Science III (GEMS III) Intern (July 2019)

U.S Army CCDC ARL | APG, MD 21005

<u>Developed greater understanding of programming languages and OOP (Object Oriented Programming) as well as developed a strong network.</u>

- Collaborated with teammates to explore and create Virtual Reality (VR) environments.
- Utilized python in the creation of art through python turtle graphics.

Real-World Internships in Science & Engineering (RISE) Intern (July 2018)

Program Product Director, Machine Foreign Language Translation Systems (PD MFLTS)

U.S Army CCDC C5ISR Center CP&I | APG, MD 21005

Tested the MFLTS program, discovered and reported bugs and improvements.

- Researched the proposed use of MFLTS and impact on soldiers.
- Developed professional skills through a series of leadership workshops
- Provided assistance to professional engineers and scientists to complete results-oriented work
- Cultivated hands-on experience in an office environment.
- Developed basic knowledge of Command Lines.

LEADERSHIP

First Robotics Competition (FRC) (September 2020 – October 2021)

Programming Mentor (Team 7770)

- Organized programming lessons.
- Supervised the creation of modular code.
- Developed test table to debug and test all code.
- Collaborated with other mentors to create a safe learning environment.

First Robotics Competition (FRC) (October 2019 – September 2020)

Programming Lead (Team 7770)

- Earned the team \$2,500+ in grants.
- Supported team to semi-finalist in state competition.
- Collaborated with other teams (Team 3941) to share information and network.

SKILLS

Programming Languages: Java, C++, Python, HTML, CSS

Tools: Power Apps, Unity Engine, CAD: Fusion, Inventor, Blender, Git, Linux

Technical Skills: VR SImulation Development, Data Management & Analysis, ROS, Cyber Safety

Other Skills: Project Management ,Research Skills, Networking,Teaching & Mentoring, Documentation & User Guide Creation