
SUMMARY

Passionate, dedicated, and goal-oriented student developer with a strong foundation in algorithms, problem solving, and system design. Possessing four years of programming experience accompanied with strong leadership skills and critical thinking. Strong background in project management and thrives in a team setting.

EDUCATION

University of Virginia | Charlottesville, VA *Expected 2023*

- B.S in Computer Science in the Engineering School. GPA: 3.63
- Undergraduate Coursework: Discrete Mathematics; Data Structures and Algorithms; Program and Data Representation; Theory of Computation; Digital Logic Design; Multivariable Calculus; Ordinary Differential Equations; Software Testing

WORK EXPERIENCE

Computer Science Research Assistant *Spring 2021– Present*

UVA Department of CS

- Contributed to a robotic platform that is capable of moving up to 1,000lbs of scenery around the stage.
- The robot is based on the Arduino Yun Rev 2 and communicates with a server over a closed network.
- Developed code in Python, C++, and JavaScript to allow the robotic platform to move autonomously.

PROJECTS AND TECHNICAL EXPERIENCE

- **Library Catalog – Java Application** *Spring 2019*
 - Developed a desktop application where librarians and users can review and checkout books at a certain library
 - Utilized the **JavaFX** Library to create unique and separate User Interfaces
 - Connected the respective portals to a central Library database to ensure access by both parties
- **Type Master – Python Game** *Fall 2020*
 - Used the **PyGame** Library to create a typing game that allows users to practice their typing skills
 - Used the **hash-chaining** technique to make the game run efficiently by quickly storing and retrieving thousands of words from a hash table
- **Periodic Table Guide – Java Application** *Spring 2021*
 - Created an interactive desktop application to help high school students learn the periodic table
 - Implemented a quiz system where students can test their understanding of the periodic table
 - Created a game that generates a randomized word search puzzles using elements from the periodic table
- **VEX Robotics – RobotC** *2016 - 2019*
 - Designed and developed a robot to participate in challenges set out by the VEX Robotics foundation
 - Devised and implemented code in RobotC to be run during autonomous and user-controlled sessions
 - Successfully lead a team of builders, programmers, drivers, and notebook managers through state level competitions to the international event, WORLDS Vex Robotics

SKILLS

- Languages: Java; Python; C; C++; HTML; CSS;
- Tools: Visual Studio Code; Eclipse; GIT; PyCharm
- Frameworks: Django; PyGame; JavaFX

Links

- Please check out my personal website which has links to my GitHub, LinkedIn, Resume and Facebook page.
 - Website: ayubshahab.github.io