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AYUB SHAHAB

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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 and critical thinking. Strong background in project management and well-developed people skills.

SKILLS

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

WORK EXPERIENCE

Computer Science TA

Spring 2021– Present

UVA Department of CS

- Course: Software Development Methods, an intro Java course focused on object-oriented programming and data structures
- Held office hours to help students understand various data structures and their implementations.

EDUCATION

University of Virginia | Charlottesville, VA

Fall 2019 – Present

- 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.

Gar-Field High School | Woodbridge, VA

Fall 2017 – Spring 2019

- International Baccalaureate Diploma Recipient. GPA: 4.61

PROJECTS AND TECHNICAL EXPERIENCE

- **Library Catalog – Java Application (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 (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 (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.