Aaron Post

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EDUCATION

The Ohio State University, Columbus OH   **Aug 2020 - May 2024**
BS in Computer Science (cumulative GPA 3.45)
Relevant Coursework: Project Design & Development, Capstone Design, Databases, Data Structures

WORK EXPERIENCE

Software Design and Development Research Assistant   **Mar 2023 - Present**
The Ohio State University, Columbus OH
- Designed and developed 3 academic video games and simulations in a team setting.
- Collaborated with Metro Early College High School to solve complex Math and Physics problems.
- Discussed design details and planned future projects in regular meetings twice a week.
- Worked with Unity, C#, and .NET; used Git/GitHub Projects for source code and project planning.

Project Design & Development Teaching Assistant   **Aug 2023 - Present**
The Ohio State University, Columbus OH
- Held office hours twice a week; provided technical support and guided students to make smart design decisions for 6 different large Agile sprints (labs).
- Met monthly with multiple groups of 6 students at a time; reviewed student's code based on high-quality programming practices including readability, high cohesion, and low coupling.
- Graded student labs and provided constructive feedback covering all phases of the design cycle.

RELEVANT PROJECTS

Java Plugin Development (Minecraft) - Developed a large minecraft plugin in Java. Created a system for managing persistent data efficiently. Integrated with Google's GSON API. Applied knowledge of graph theory for pathfinding systems. Used Maven to automate build processes and install libraries. *(Java, JSON, XML, Maven, Github)*

Database Development - Created a database for an imaginary client. Followed through the complete design process, including creating an EERD, relational schema, and functional SQL database. *(SQLite)*

Networking File Transfer Programs - Created file transfer programs in Python that read files, separated data and transmitted packets between a client and server using TCP and UDP. Accounted for dropped packets. *(Python, Unix)*

Stern Gerlach Simulation and Einstein's Quest - Designed and developed 2 prototype simulations that teach quantum physics. Implemented a data-driven system that walks the user through experiments step by step and checks their progress along the way with multiple-choice and open-ended questions. *(C#, .NET, XML, Unity, Github)*

Legend of Zelda Game Development - Planned and executed 5 Agile sprints. Led a group of 6 students to create a game. Focused on high quality code and wrote weekly code reviews. Managed tight deadlines and debugged difficult problems with peers' code. *(C#, .NET, Monogame, Github)*

TECHNICAL SKILLS

- Programming Languages: C#, Java, C++, Python, SQL, C, Scheme48 (Functional), x86 Assembly
- Development Tools and Frameworks: .NET, Visual Studio, VSCode, IntelliJ, Eclipse, Unity, Linux/Unix, Maven, Monogame, JSON, XML, HTML/CSS
- Version Control and Project Planning Software: Git, GitHub projects, Azure DevOps, Milanote, Trello
- Expertise with object-oriented design and common design patterns, SOLID principles, relational database design
- Knowledge of Microsoft Software Suite: Word, Excel, Powerpoint, Teams, Outlook, OneDrive, Visio, etc.