Matthew Schwartz

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Work Experience

Amazon Web Services, Software Development Engineer *April 2022 - Present*

• Develop Tying, a Java-based engine for automated patching and OS migration of Amazon hosts.
• Design and author integration and end-to-end load tests for the Tying engine.
• Improve dev-ops tooling and monitor service metrics proactively and in on-call capacity.
• Expand and maintain CI/CD and distributed cloud computing infrastructure-as-code.

Epic Systems, Software Developer *August 2019 - August 2021*

- Develop and design the App Orchard website, a marketplace for third-party healthcare apps.
- Implement RESTful web APIs to expose health record data according to the HL7 FHIR standard.
- Pioneer transition of App Orchard site from MVC pattern to single-page React app.

Education

Rice University, 2019

- B.S. in Computational Physics; Minor in Computational and Applied Mathematics.
- GPA: 3.88.

Projects

Personal Blog Site, https://mattzschwartz.web.app/

- A personal website, portfolio, resume, and blog built on the React framework.
- **Technologies:** React, Recoil, Typescript, Firebase, HTML, CSS, Material UI.

Game Engine, https://github.com/mzschwartz5/Game-Engine

- A home-made 3D renderer, physics simulator, and game play engine bundled together.
- **Technologies:** C++, OpenGL.

Morels, https://github.com/mzschwartz5/Morels

- A two-player strategy card game built in Unity3D, playable over a LAN connection.
- **Technologies:** C#, Unity3D, Blender, Mirror Networking.

Jewel3d, https://matthatter419.itch.io/jewel3d

- A modern 3D take on the classic game Bejeweled, made in 48 hours for the Retro Game Jam.
- **Technologies:** C#, Unity3D, Blender, Garageband

Research Experience

Defect Engineering In Semiconductors *January 2019 - May 2019*

Rice University Electrical Engineering Department, Houston, TX

• Imaged and analyzed defect-engineered transition metal dichalchogenides using STM techniques.

• Cleaned and applied Fourier transforms to data in MATLAB to resolve new electronic structures in the samples.