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DAVID SZYMULEWSKI



EDUCATION**University of Southern California**

M.S. Computer Science

*May 2023***GPA: 3.8****University of Wisconsin - Madison**B.S. Astrophysics, Mathematics and Physics | [Senior Thesis](#)*May 2021***GPA: 3.83**

SKILLS**Languages:** C#, HTML/CSS, JavaScript/TypeScript, Python, SQL**Tools/Frameworks:** AJAX, Angular, Bootstrap, Express.js, Flask, Git, MySQL, Node.js, REST API**DevOps:** Confluence, CI/CD, Jenkins, Jira, Scrum

EXPERIENCE**Site Reliability Engineer Intern**, Everbridge*Jun. 2022 - Aug. 2022*

- Monitored key product statistics by creating SQL scripts to interface with Django and MySQL databases, tracking areas of improvement and ultimately improving user retention.
- Coordinated cross-team to address codebase bugs, improving service stability and refining user experience.

Research Assistant, University of Wisconsin - Madison*Jun. 2018 - Dec. 2021*

- Designed a Python code framework to automate stellar-evolution simulations and organization of outputted data on remote servers, improving productivity by as much as 100% with no loss in accuracy.
- Adapted stellar-evolution code to test hypotheses on the formation of blue-lurker stars, discovering one explanation for their existence and earning a Thesis of Distinction and the Award for Excellence in Astrophysics.
- Analyzed research data by writing data reports using Python, improving team-wide communication of ideas.
- Mentored new team members and authored a training manual to ease the learning curve of future students.

PROJECTS**Events Search Web Application and iOS App***Jan. 2023 - May 2023*

- Designed three iterations of an events-search application employing various front- and back-end technologies hosted on AWS, that allows users to find, favorite and share concerts and other events.
- Developed separate front-ends using HTML/CSS & JavaScript, Angular featuring Bootstrap classes, and Swift.
- Wrote respective back-ends using Python & Flask; and JavaScript, Node.js & Express.js.
- Enhanced application responsiveness and user experience by employing AJAX techniques to communicate with RESTful back-end servers and Ticketmaster, Spotify & Google APIs.
- Portfolio links: [Version 1](#) (HTML/CSS, JavaScript), [Version 2](#) (Angular) and [Version 3](#) (iOS).

Unity3D Video Game | [Portfolio Link](#) | [Game Design Document](#)*Jan. 2023 - May 2023*

- Utilized Unity to program gameplay, physics and UI in C# while coordinating with development team to publish an immersive survival horror video game, earning the Best Game award in CSCI 526.

Socket Programming Project*Oct. 2021 - Dec. 2021*

- Implemented back-end servers in C/C++ to store social media user data and communicate via UDP with a main server that handles front-end requests.
- Wrote code that enables the main server to communicate with client-facing programs via TCP to suggest friend recommendations based on geographical proximity and mutual interests.