Matthew Twyman

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SUMMARY

Matthew Twyman, software developer, excels in leadership and delivering high-quality results. Notable: 25% efficiency boost in 6 months through code optimization; proficient in diverse programming languages/tools.

EDUCATION

Bachelor of Science in Computer Science (Games)

University of Southern California · Los Angeles, CA · 2024 · Magna Cum Laude

· Relevant Coursework: Video Game Programming in C++, Final Game Project in Unity, Game Design Workshop, Software Development Principles, Intermediate Game Production, Pipelines for Games and Interactives, Game Engine Programming in C++, Computer Graphics, Artificial Intelligence in Python, Data Structures, Algorithms and Theory of Computing, and Computer Systems.

SKILLS

Programming: AWS, HTML, CSS, JavaScript, C/C++, Java, Python, C#, SQL, MySQL, React, Ruby on Rails, Node.js, TypeScript
Game Development: Maya, Unity, Blender, OpenGL, UE4, Game Design
Development Tools: Git, Perforce, Jira, GitHub, PyTorch, Visual Studio, Docker, GCP
Presentation Tools: Adobe Creative Cloud Suite, Microsoft Office Suite, Google Apps

EXPERIENCE

Software Engineer

Luceris LLC   **December 2023 - Present, Chicago, IL**

· Build out SaaS Middleware Platform to integrate business processes of enterprise systems, route messages, and monitor overall processes.
· Consult on transforming business requirements into technical solutions including application of AI use cases, process improvements, and user interface improvements.
· Resolved software application issues, diagnosed system failures, test and document new REST API features and technologies using an Agile development process, TypeScript, and unit testing.

Computer Graphics Research Intern

USC Institute for Creative Technologies   **May 2023 - December 2023, Los Angeles, CA**

· Used the Python programming language, deep learning, TensorFlow, and the PyTorch machine learning framework using methodologies and design patterns to create and prototype a synthetic voice application based on sample input datasets to improve the realistic accuracy of the synthetic voice by 25% in 5 weeks.
· Collected and synthesized dozens of source videos and used a convolutional neural network-based artificial intelligence technique with 1,000+ lines of code to create a deployment of a deepfake of a well-known singer.
· Received training in operating the Vision and Graphics Lab "Light Stage", which captures the facial features of actors in real-time to create realistic facial recreations using Maya.
· Assisted with a geographic terrain reconstruction project using neural rendering techniques.

Software Support Intern

Luceris LLC   **January 2022 - December 2023, Chicago, IL**

· Manage flow of support issues from initiation to resolution.
· Testing and writing resolution reports for a cloud platform that connects enterprise systems via APIs.
· Utilize industry-leading software systems such as ServiceNow, Yardi, and Famis360.

Course Assistant

University of Southern California   **August 2022 - May 2023, Los Angeles, CA**

· Conduct weekly office hours, teach lab classes, and review student homework.
· Assist the professor in creating new lesson content for an introductory Computer Science class taught in C/C++ to achieve the goals of improve student understanding of course material by 20% in 4 months.

PROJECTS

Capstone Game Development Project

USC Games · www.lmthegame.com/ · May 2023 -May 2024

· Directed and managed a five-person team of game programmers and software developers using Notion to maintain deadlines and requirements.
· Managed a backend C# codebase on Perforce for 3D fishing game using the Unity game engine and conducted code reviews.
· Collaborated with USC Games faculty and the project director to execute key game decisions.
· Developed a realistic boat movement and camera mechanic using CineMachine and Unity.
· Created weekly builds and fixed technical bugs for weekly review by over 100 users.