Oskar Oramus

Junior Programmer

https://oskaroramus.dev/
Devon, UK

Technical Skills

Languages / Frameworks

- C#
- C++
- OpenGL / GLSL
- HTML / CSS / JS
- Python / Flask

Mathematics

- Linear Algebra
- Calculus I, II & III
- Differential Equations
- Fourier Transform
- Discrete Maths

Graphics

- Procedural Generation
- Ray Marching
- Shadow Mapping
- GPU Instancing
- Shaders
- Post Processing

Artificial Intelligence

- Reinforcement Learning
- Finite State Machine
- Behaviour Trees
- Goal Oriented Action Planning

Tools

- Unity / Unreal Engine 5
- GitHub
- Perforce
- Blender
- Jira / Trello
- Notion

Achievements

Top 3 in 15 game jam scoring categories.

Top 6 internationally in the KeyLoop Dealership Competition

Interests

Apart from coding, you'll find me enjoying Rocket League, Counter Strike, chess, bouldering and competing in game jams.

References on request

Statement

Highly dedicated and self-motivated professional with a background in mathematics seeking to develop my problem solving and critical thinking abilities in real world applications. Interested in machine learning and domains where optimisation plays a pivotal role, such as graphics rendering and algorithmic implementations. Well-versed in advanced mathematical concepts, including linear algebra, differential equations, and calculus. Demonstrated success in a large collaborative environment using GitHub, Perforce and Jira.

Experience

Aug 2023 - Present

Junior Programmer • **Free Radical Design**

Unreleased TimeSplitters Project

- Created and maintained tools that worked efficiently within the given network constraints.
- Collaborated with a dynamic team of over 90 people, ensuring my systems are intuitive and work within the specification.
- Development of AI behaviours that adheres to the specification given by the design team.
- Addressed and resolved software anomalies through systematic debugging and troubleshooting, ensuring the seamless functionality of the application.

Jan 2023 – Mar 2023

AI Developer • Freelance

- Strategic AI that understands the surroundings to offer a variety of strategies for players.
- Effective communication abilities to organise coordinated attacks with other AI entities.

May 2022

Gameplay & Tool Programmer • Proximal Games LTD • Contract

- Decoupled the codebase to enable fast and predictable modifications for game designers.
- Addressed architectural concerns and helped devise a more effective system.

Sept 2021 – Aug 2023

Mobile Game Developer • Freelance

- Developed a data & event driven architecture that ensures scalability and performance for low end devices.
- Incorporated valuable player feedback and quality of life features to enhance and refine the product.

Jul 2021 – Sept 2021

AI Programmer • Notiontheory • Contract

- AI Accelerated Houdini procedural content generation.
- Greatly improved the project size and compilation time with a bespoke tool that removes unused files.

Education

Sept 2019 – Jun 2023

BSc Computer Science • University of Exeter

- Dissertation: Reinforcement Learning for Air Traffic Control with 99% flight accuracy and 98.4% fuel efficiency. Curriculum learning to speed up the learning process, with carefully tweaked reward functions to ensure alignment with the predicted solution.
- Modules: Differential Equations, Vector Calculus, Computer Graphics, Machine Learning.