

# Mia Rolfe

## Software Engineer Intern

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Computer science undergraduate with a particular interest in C++ systems programming.  
Seeking an internship for January to August 2025.  
Eligible to work in US, UK, and EU.

## Education

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### Trinity College Dublin

Sep 2021 – (expected) May 2026

*Masters in Computer Science*

Upper Second Class Honours / 3.8 GPA, twice nominated for Software Engineering Project Industry Award.

## Core Skills

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### Tools

Visual Studio, Visual Studio Code, Unreal Engine 5, Unity, Git (CLI), Perforce (client), Bugzilla

### Computer Science

Systems Programming, Computer Architecture, Concurrent Programming, Algorithms & Data Structures, Vector and Matrix Mathematics

## Experience

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### Software Engineer Intern

Jun 2024 – Sep 2024

*Arista Networks*

- Worked with a globally distributed team of 20 software engineers utilising Scrum.
- Implemented and extended existing unit and functional testing.
- Contributed production code to a large pre-existing legacy codebase.

### Path Planning Lead

Aug 2022 – Aug 2023

*Formula Trinity*

- Worked with a 15-student team to engineer an autonomous driving solution, using issue-tracking for project management.
- Led a sub-team of 4 to develop a reactive pathfinding solution utilising camera and Lidar input data.
- Competed in the Formula Student AI 2023 competition at Silverstone Circuit.

### Software Developer Intern

Jun 2021 – Sep 2021

*Tom Phillips + Associates*

- Developed a geospatial data visualization tool in close collaboration with non-technical staff.

### Software Developer Intern

Jun 2019 – Sep 2019

*Giant Animation*

- Implemented internal tooling and scripts for onboarding animators and artists.

## Projects

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### MiniFPS

Feb 2023 – Oct 2023

*Software raycasting Wolfenstein 3D clone*

- Programmed a software raycasting renderer using SDL2, supplemented by retro shooter gameplay.
- Created an accompanying custom level editor using Dear ImGui to allow easy level creation and editing.

### CHIPSZ

Jan 2023 – May 2023

*Microsoft HoloLens 2 Game*

- Developed an augmented reality action game for HoloLens 2 with an 8-student team, assisted by 2 mentors at Havok.
- Created internal subsystems and their APIs to augment the StereoKit framework, including: object pooling, shader management, and audio.