

Yixin He

yixinh@alumni.cmu.edu | (346) 201-8788 | <http://yixinhe.me> | <http://github.com/jackajackalop>

Education

Carnegie Mellon University, Pittsburgh, PA 2016 –2020
Bachelor of Computer Science & Fine Art, GPA: 3.61
Dean's List: Spring 2018, Fall 2018, Spring 2019

Work Experience

Microsoft Redmond, WA
Software Engineer in GPX 2021

- + Developed and improved various features for product hydration and search functionality of the Xbox store.
- + Contributed to service reliability by participating in the on-call rotation, investigating and resolving various bugs and live-site issues, and adding better testing coverage to our existing services.

Gaming Software Engineering Intern in PlayFab 2019

- + Developed the bulk action processor, allowing game developers to run actions on large segments of players
- + Implemented CRUD APIs with C# and .NET Core, and developed unit and end-to-end tests using Moq
- + Added functionality to have actions run at regular scheduled intervals by using Orleans with DynamoDB

Carnegie Mellon University Graphics Pittsburgh, PA

Computer Game Programming Intern 2020

- + Designed and implemented an interactive website depicting the OpenGL rendering pipeline, showing the transformation and flow of data through various buffers and streams during each stage.

Teaching Assistant 2019

- + Led lectures and class activities on computer game programming principles such as collisions and walk meshes as well as weekly office hours for individual student help.
- + Worked with instructor to update course topics and infrastructure based on student feedback. Produced numerous course materials in the form of base code and examples and 3D models for student use.

Related Projects

Victo Ngai-ify Pittsburgh, PA

Capstone Project 2019-2020

- + Designed and implemented a series of art-directable stylization shaders for real-time rendering in games based on the art style of Victo Ngai, a contemporary illustrator, using C++ and OpenGL
- + Presented work at the Undergraduate Research Symposium and SIGGRAPH 2020

Watercolor Stylization for Games Pittsburgh, PA

Independent Study Project 2019

- + Implemented a watercolor stylization shader for real-time rendering in games based on the research paper, "Art-Directed Watercolor Stylization of 3D Animations in Real-Time" using C++ and OpenGL
- + Presented work at the annual Undergraduate Research Symposium

Skills

Programming: C++, C#, C, Javascript, Python, HTML/CSS, OpenGL

Other: Git, Visual Studio, Photoshop, Premiere, Autodesk Maya, Unity