Kewei (Kevin) Han

keweihan.com • keweihan@andrew.cmu.edu • (412) 708 8920

EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Master's in Software Engineering – Scalable Systems

December 2024

GPA: 4.06/4.33

Coursework: Design Patterns, API Design, Quality Assurance, Formal Methods, (Planned) Cloud Computing

University of Michigan

Ann Arbor, MI

Bachelor of Science in Engineering in Computer Science

May 2023

GPA: 3.72/4.00

Coursework: Data Structures and Algorithms, Web Systems, Operating Systems, Database Management Systems

SKILLS

Programming Languages: C/C++, C#, Python, Java, SQL, HTML/CSS, JavaScript, Scheme

Tools/Frameworks: Unity, Unreal Engine, React, Vue.js, Git, Jira

EXPERIENCE

Ann Arbor, MI **Appstop**

Programming Intern

May – August 2023

- Played key role as one of two lead programmers in development of a mobile game application using Unity and C# for publishing on mobile app marketplaces
- Researched and applied Unity APIs to implement robust user level creating and sharing functionality
- Created custom Unity editor tools to significantly streamline and expedite the level design process

WolverineSoft Studio Ann Arbor, MI

Programmer

Sept.—Dec. 2020, Jan.—May 2023

- Contributed as a programmer to multiple interdisciplinary 25+ person teams to create publish-ready games
- Designed and executed inheritance-based design patterns to implement player mechanics and enhance scalability
- Completed tasks in a scrum team environment through Jira to smoothly collaborate and iterate on game features

PROJECTS

OrbitVR

University of Michigan

Unreal Engine VR Project

March – May 2023

- Designed and developed an accurate, to-scale interactive VR International Space Station experience with a team of four
- Utilized Unreal C++ Blueprints to implement inheritance-based affordance systems for scalability and code quality
- Investigated Unreal materials system and tools to create realistic space environments and enhance immersion

Desktop Defenders

University of Michigan

Unity Game Project

October — December 2022

- Collaborated with a five-member team to design and develop a cooperative bullet hell game in Unity featuring asymmetrical controls (mouse and controller) to deliver uniquely engaging player gameplay
- Led UI elements design and developing scalable backend logic to enhance player engagement and game functionality.
- Conducted weekly playtests to gather and analyze feedback to inform the iterative design process
- Presented game at student showcase with over 350 attendees and placed 6th out of 16 teams in audience vote

Insta485 Web Systems Project

Ann Arbor, MI

Academic Project

Academic Projects

October—November 2020

- Developed full-stack mock Instagram web application to replicate key features such as login and posting
- Constructed a Flask server application to maintain a backend SQL database and custom REST API to handle requests.
- Implemented client-side dynamic application using JavaScript and React to mimic Instagram user experience

Operating Systems Projects

University of Michigan

September — December 2020

- Developed a multi-threaded disk scheduling application in C++ with focus on optimized thread management
- Implemented external pager for handling virtual memory requests, address space management, read/write faults, system call handling, and physical memory management
- Created an implementation of the C++ thread library interface, including monitors for synchronization between threads