

I'm a game developer specializing in building (and occasionally designing) exceptional game experiences. Currently, I'm interested in building accessible inclusive game products, data/business analysis, and data visualization (digital twins).

Technologies and Languages

- Languages: Python, C#, R, Java, JavaScript, C/C++; English, Mandarin, Japanese
- Technologies: Unity, Unreal 5, Git, Unix Scripting, 3D Max, HTML/CSS, MySQL, Adobe Ps/Pr/Ae/Au
- Other: AI behaviors, Data structures and algorithms, Data analysis and visualization, Player controls, Physics interactions, Prototyping, Optimization, Documentation, QA/Automation testing

Work Experience

Math and Science Teacher (Part-time)

Virtute Innovation Academy
Aug 2023 – Present

- Plan and design standards-based lessons tailored to diverse groups of learners, incorporating multiple modalities to accommodate various learning styles.
- Implement daily lessons with a focus on engaging students through interactive and differentiated instruction, resulting in an average grade improvement of 22% within a single academic term.
- Facilitate weekly seminars with fellow staff members to review course progress, identify areas for improvement, and implement necessary adjustments to enhance student learning outcomes.

Senior Game Developer

KID Fans Club
Apr 2022 – Jan 2023

- Directed a team of 6 game developers, achieving a 15% reduction in project completion time by implementing agile methodologies and optimizing workflow processes.
- Designed and developed a top-selling game that generated around C\$700k in revenue within the first three months of release, highlighting innovative gameplay mechanics and immersive storytelling.
- Conceptualized, prototyped, and iterated on game features, ensuring alignment with market trends and player preferences.
- Mentored and trained junior developers, resulting in a 30% improvement in code quality and a 25% increase in productivity.

Co-Op / Intern

Advanced Micro Devices, Inc.
Nov 2020 – Aug 2021

- Collaborated with architecture team and worldwide performance analysis to comprehend product specifications and contribute to the development of new GPU architectures.
- Designed and implemented analysis tools using Python and R to enhance performance within the post-silicon workflow, resulting in streamlined processes and improved efficiency.
- Developed analytical frameworks and methodologies to evaluate and optimize GPU performance, addressing challenges in post-silicon validation and verification.

Senior Game Developer

1982 Game
Jul 2019 - Jan 2021

- Developed innovative game system and mechanics for an online visual novel Gocha game, resulting in a successful release on major platforms.
- Implemented new technologies and techniques to improve game development, resulting in a 20% increase in team efficiency and a 15% reduction in bug-related delays.
- Collaborated with the art team to optimize game performance and stability, resulting in a 15% reduction in load times and a 20% increase in frame rate.

- Collaborated with architecture team and worldwide performance analysis to comprehend product specifications and contribute to the development of new GPU architectures.
- Designed and implemented analysis tools using Python and R to enhance performance within the post-silicon workflow, resulting in streamlined processes and improved efficiency.
- Developed analytical frameworks and methodologies to evaluate and optimize GPU performance, addressing challenges in post-silicon validation and verification.

Education

University of Washington, Seattle**Sep 2019 – Aug 2023****B.A. (JAPANESE) WITH MINOR(S) in COMPUTER SCIENCE (DATA SCIENCE), APPLIED MATHEMATICS, STATISTICS**

- Scholarship Status: DEAN'S LIST 2020 - 2023 **3.72 / 4.0**
- Related Courses: Game Design and Development, Data Analysis and Visualization, Digital Twin

Certifications

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- THE UNIVERSITY OF WASHINGTON **ANNUAL DEAN'S LIST** **2020 – 2023**
 - Arctic Code Vault Contributor **2020**
 - The 5th Annual International Mathematical Modeling Challenge **Finalist** and **Meritorious** **Jun 2019**

Projects

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- **“Chong Qi Qing Chun” – Lead Software Design Engineer | Oct 2021 – Present**
 - Led a multidisciplinary team to translate educational theories into interactive gameplay mechanics tailored for language learning, resulting in a successful publication in textbooks.
 - Collaborated with academic institutions and researchers to bridge the gap between educational theory and interactive learning experiences and ensure alignment with industry standards and educational objectives.
 - Implemented a new game framework that improved bug detection rates by 40%, enhancing game stability and player experience.
 - **Fabrik Architect - Web Developer (Part-time) | Oct 2023 – May 2024**
 - Design and establish user-friendly websites, including optimizing portfolio pages, resulting in a 72% increase in user clicks and subsequently 37% in project consulting.
 - Provide adequate training to 4 staff members in internal web functions, including steps on how to make minor updates and changes independently.
 - Devised custom responsive WordPress sites from design comps that included advanced WordPress features, such as Custom Post Types, Advanced Custom Fields, and WordPress Customize API.
 - Administer the full lifecycle of software development for 8 critical projects of the company with 100% on-time delivery while staying 16% under budget with the design team and project manager.
 - **BenchMark-Automation – Software Design Engineer (Project Lead) | May 2021 –Aug 2022**
 - Led a Python automation project aimed at streamlining repetitive testing processes, testing GPU drivers across multiple platforms, and analyzing the performance of GPU architectures, increasing test coverage by 30% and decreasing manual testing rate by 60%.
 - Enhanced industry alignment by leveraging Python automation for benchmarking, reflecting modern software engineering practices.
 - Integrated automated testing into CI/CD pipelines with Jenkins, improving build and deployment efficiency by 10%.
 - **Global Game Jam – Game Designer / Developer | 2018 & 2019 & 2020**
 - Led a team of 7 members to conceptualize, prototype, develop and publish an indie game within 48 hours that generated around 6k sales within the first two weeks of release.
 - Implemented game systems and mechanics using Unity (C#) and Python automation scripting, achieving a 15% reduction in project completion time.
 - Demonstrated the ability to deliver high-quality game projects within tight timeframes and established a reputation for creativity, dedication, and leadership within the game development community.