

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

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- Languages: Python, C#, R, Java, JavaScript, C/C++
- 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

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### 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\$0.7 million 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 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

- 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

- **“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.