ERIC KO

EMPLOYMENT

Game Developer	**Pocket Talos LLC**	**June 2019 - Present**

AutoKnight (in development and published under **Iron Horse Games**)
- Designed and programmed all mechanics and features. *C#, Unity*
- Managed scrum notes, sprint reviews reports, and development blogs.
- Worked closely with the publisher and QA testers to ensure new features were designed and executed well.
- Integrated communication between cloud-based servers, web services, and front-end systems.
- Built an anti-cheat system that encrypts save data and detects data tampering. Data tampering had 84% precision and 76% recall with a group of cheaters with at least 5 months of experience

		March 2019 - June 2019,
Technical Software Developer Intern	**Brain Game Center**	**January 2020 - Present**

- Built several variations of a psychological test that assessed visuospatial short-term working memory that helped train 30,000 people on working memory to understand individual differences in interventional needs. *C#, Unity*
- Refactored a psychological test's tutorial slides to dynamically utilize and set image and text components to render the slide rather than having a single poorly unscalable and unmaintainable picture for each slide.
- Coordinated with mentors to ensure new features followed design specifications.

EDUCATION

Riverside, CA	**University of California, Riverside**	**Fall 2017 – June 2021**

- B.S. in Computer Science, June 2021 (Dean's List)
- Undergraduate Coursework: Virtual Reality; System Administration; Database Management; Software Testing & Verification

TECHNICAL EXPERIENCE

Projects
- **Incrementum** (July 2019 - Present). A set of tools geared towards assisting game developers with a variety of tasks for incremental / idle game development (reduced analysis. Provides formulas and iterative models of a variety of incremental / idle game progression systems as well as a robust numeric library that supports multiple notations. Reduced time spent calculating optimal choice by 93% C*++, SDL*
- **Schedule It!** (October 2019 – December 2019). A scheduling web application for time management, and coordinating meetings. You can create events, invite friends to your events, and join other events! *React, Javascript, Firebase*
- **Unconventional Space** (March 2019 – May 2019). A 3D VR puzzle game involving the manipulation of the user's perception of space to simulate non-euclidean geometry, creating these seemingly impossible illusions. *C#, Unity, Oculus*
- **Runescape Bot** (March 2018 – May 2019). Created an automation program for the game that simulated human interaction while completing specific tasks at a reasonable speed. *C++, SDL, OpenCV, TensorFlow*
- **Tanks AI** (April 2019). Developed a dynamic AI bot for the Unity Project *Tanks* whose behavior and difficulty is based on the actions the player takes. *C#, Unity*
- **Pac-Man** (Jan 2019). Developed my own game engine with custom ghost A.I. *C++, SDL*

Languages and Technologies
- C++; C#; SQL; Java, Javascript; Bash; Python
- Unity; SDL; Maya; Blender; XML; Oculus, SFML; OpenCV; OpenGL; Unreal Engine; TensorFlow; Firebase; AWS; GameSparks; PlayFab; React; Github; Balsamiq; Unity Ads; Facebook Ads; ironSource; AppsFlyer

Other
- Created a Discord bot for my server that moderated conversations, delivered notifications, and scheduled events.