

EMPLOYMENT

Founder / Developer **Pocket Talos LLC** **Jun 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 (synchronize in-game progress with other devices) and web services (track and manage user behavior analytics).
- 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

Mar 2019 - Jun 2019,
Jan 2020 - Present

Technical Software Developer Intern **Brain Game Center**

- 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** **Sept 2017 – Jun 2021**

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

TECHNICAL EXPERIENCE**Projects**

- **Incrementum** (Jul 2019 - Present). A set of tools geared towards assisting game developers with a variety of tasks for incremental / idle game development. Provides formulas and iterative models for a variety of progression systems as well as a robust numeric library that supports multiple notations. Reduced time spent calculating optimal choice by 93% with a group of mostly novice game developers **C++, C#, SDL**
- **Schedule It!** (Oct 2019 – Dec 2019). An online calendar tool for time management and coordinating meetings. You can view current events and schedule events accordingly. **React, Javascript, Firebase**
- **Unconventional Space** (Mar 2019 – Jun 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** (Mar 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** (Apr 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

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

OTHER

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- Contributed to the TensorFlow.Net repository by porting unit tests from Python to C#, and debugging examples and unit tests. **C#, Python**
 - Created a Discord bot for my *AutoKnight* QA server that moderated conversations, delivered notifications, and scheduled events. **Python**