# **Kai Chang**

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#### Education

Oregon State University Bachelor of Science in Computer Science	June 2023 GPA: 4.0
University of the Pacific Arthur A. Dugoni School of Dentistry Doctor of Dental Surgery (DDS)	June 2016
University of the Pacific Bachelor of Science in Biology	May 2013 GPA: 3.94

# **Projects**

## **Breakout AI**

#### **Game Development | Machine Learning**

github.com/kaichang1/breakout-ai

- Collaborated in a team of three developers to create a Brick Breaker game, featuring an advanced AI opponent for player-versus-AI gameplay.
- Continued development independently by forking the original repository, emphasizing advancements in ML capabilities as well as in gameplay, UI, and UX.
- Built with **C#**, **Unity**, and the **Unity ML-Agents Toolkit** using **Continuous Integration**. Trained the AI opponent using a combination of reinforcement and imitation learning.

## **Marina Management API**

#### **Back-End Web Development | Cloud Computing**

github.com/kaichang1/marina-management-api

- Developed a cloud-based REST API utilizing a NoSQL database to help manage boats in a marina.
- Built with **Node.js**, **Express.js**, and **Google Cloud Platform**. Tested with **Postman**.

# **Stock Article Analyzer**

#### Full-Stack Web Development | Data Analysis

github.com/kaichang1/stock-article-analyzer

- Created a website to analyze stock articles. Analysis results include a parsed list of all stocks mentioned, sentiment analysis to determine article tone, and selected key sentences from the text.
- Built with **Python**, **Flask**, and **Bootstrap** using **Agile Scrum** methodology and **Jira** for task management.

# **Technical Skills**

#### Languages

- **Proficient:** Python, C#, SQL
- **Familiar:** JavaScript, C/C++, HTML, CSS

**Frameworks & Technologies:** Git, Node.js, Express.js, React.js, Flask, Bootstrap, Google Cloud Platform, Postman, Unity Game Engine

# **Work Experience**

# General Dentist: LC Dental, Goh Smile Dental Care

Nov 2017 - Dec 2021

- Employed critical thinking and problem-solving skills to diagnose complex cases and develop effective treatment plans.
- Exhibited strong teamwork and leadership skills by coordinating and communicating with a team of five staff members to ensure smooth and efficient office operations.

#### **Dental Resident:** Community Regional Medical Center

July 2016 - June 2017

- Utilized adaptability and time-management skills to perform routine and hospital dentistry in a Level 1 Trauma Center.
- Demonstrated ability to respond quickly, effectively, and reliably in high-pressure situations through 24-hour on-call responsibilities for dental emergencies.