# Saif Kausar

(408) 656-7243 • saifkausar@gmail.com • linkedin.com/in/saifkausar • saifkausar.com • github.com/skausar1

Computer scientist with proficiency in Artificial Intelligence (AI), software development, and game design. Excited to be part of the ongoing revolution in virtual gaming by leveraging expertise in AI to improve the gaming experience for both casual and avid gamers.

#### **ACHIEVEMENTS**

- Effectively used 4 ML techniques to deliver improvements in data analysis across personal and professional projects.
- Proficient in 6 different programming languages.
- Completed an accelerated bachelor's and master's degree in the span of 4 years.

#### **EXPERIENCE**

## Researcher & Programmer - Tell Me If It Heals (Python, LaTeX, Excel)

April 2022 – June 2022

- Developed a video imaging technique that provides future portrayals of wounds allowing for earlier medical intervention.
- Utilized artificial intelligence and python to predict the healing trajectory of mouse wounds with up to 80% accuracy.
- Generated realistic images through a 3-Loss conditional GAN and trained a classifier to identify stages of the healing process.
- Documented and presented a paper describing processes and results using LaTeX for use in a data science forum.

## Lead Programmer - Tracing Memory (Unity/C#)

October 2020 - June 2021

- Inspired players to think nonlinearly for solutions to multivariable problems.
- Wrote 10k+ lines of C# code including QA and deployed the software for a 100-user pilot.
- Built a full UX project with animations, sounds, and complex scenes with Unity for engaging user interaction.
- Led a team of 7 programmers and artists to develop a 2D puzzle platformer across 6 months.

## Programmer and Gameplay Designer – The Trenches (Java Script, OpenGL)

July 2020 - August 2020

- Developed and launched a game design application in a university competition.
- Leveraged JavaScript and OpenGL to implement game mechanics in each level.
- Collaborated with 2 other students to produce a game exploring the trenches of an ocean.

## Computer Science Instructor, iDtech, Campbell, CA

July 2019 - August 2019

- Organized and delivered Java and Python lessons to over 100 students in weekly rapid programming courses.
- Helped students build a logical approach to programming covering concepts such as variables, loops, and data structures.

## Programmer - Time Runner (Unity/C#)

March 2019

• Designed a 2D infinite side scroller representing the "History of Video Games" in under 2 weeks.

#### **LEADERSHIP**

### Residential Assistant, UCSC College Nine, Santa Cruz, CA

September 2019 – June 2020

 Provided mentorship to 50+ residents by implementing educational and social programs as well as facilitating conflict resolution ensuring that all residents felt safe and heard.

Class President, Lynbrook High School, San Jose, CA

August 2014 – June 2018

## **EDUCATION**

## M.S. in Computer Science

September 2021 – June 2022

University of California Santa Cruz, Santa Cruz, CA

Relevant Coursework: Projects in AI, Foundations to Data Science, Computer Vision, Numerical Linear Algebra, Computer Architecture, Machine Learning, Analysis of Algorithms, Information Theory

## **B.S. Computer Science (Game Design)**

September 2018 – June 2021

University of California Santa Cruz, Santa Cruz, CA | GPA: 3.7

*Relevant Coursework*: Game AI, Game Development, Foundation to Compiler Design, Abstract Data Types, Computer Systems Assembly Language, Advanced Calculus, Intro to Data Structures

#### **SKILLS AND INTERESTS**

Languages: Python, Java, C, C#, C++, JavaScript, MIPS32

Al and Machine Learning Models: BERT, Classifiers, Generative Adversarial Networks (GAN), SVM's

## **AWARDS**

APALI Leadership Award for researching and giving back to local API communities