

Owen Bartolf

415-577-1440 | SF Bay Area (Willing to Relocate) | owen.bartolf@gmail.com | [linkedin.com/in/owen-b-362785104](https://www.linkedin.com/in/owen-b-362785104)

EDUCATION

University of California, San Diego

San Diego, CA

B.S. Computer Science, GPA 3.966

September 2019 – June 2023

- **Coursework:** Design at Large, Data Structures, Introduction to Java, Software Tools and Techniques, Rapid Hardware and Software Prototyping, Academic Research for Credit

EXPERIENCE

Undergraduate Research Assistant

Feb. 2020 – Present

Ubiquitous Data and Computing, UC San Diego

San Diego, CA

- Invited as an freshman undergraduate to spearhead software stack for graduate research project investigating the miniaturization of facial tracking technology into a low-profile wearable device (glasses) formfactor.
- Gaining in-depth experience with hardware-oriented design and development while leveraging open source libraries like Numpy and OpenCV.
- Actively developing software in multiple languages, including C and Python.
- Building a mechanism to generate videos of facial expressions on cinema-grade computer-generated characters as part of a greater study to train a neural network to identify human emotions from facial expressions.

Procedural Artist and Gameplay Programmer

Jul. 2020 – Sep. 2020

Dunn Games

Remote

- Maintained a 56,000 line codebase for Farming and Friends, a multiplayer social farming game serving over 1000 concurrent players at peak time and over 10.7 million total play sessions since its launch.
- Combined programming and design to create a powerful and efficient procedural tree generation suite that could generate trees at any stage of their life, from sapling to maturity.

Full Stack Web Intern

Jul. 2019 – Sep. 2019

Gensler

San Francisco, CA

- Built a highly flexible sustainable materials cataloging application that is in use by sustainability and design teams in nine offices worldwide using React, Node.js, and MongoDB.
- Designed and implemented a visual searching tool that permits designers to make complex queries, like finding all of the materials that were a certain color and had a certification that would not expire in less than a year.
- Created a robust administration panel and supporting collaboration tools to assist designers in maintenance and organization.

Founder, Lead Student Mentor

Aug. 2014 – Jul. 2019

Terra Linda Innovation Lab

San Rafael, CA

- Terra Linda Innovation Lab is a student led afterschool enrichment program to expand computer science education at Terra Linda High School.
- Coordinated special speaker series featuring the following speakers: Nora Poggi, Director, She Started It (2017); Lisa Secant Deluca, IBM Master Inventor (2015); Anca Dragan, Assistant Professor at UC Berkley (2018); Nora Ayanian, USC Roboticist (2017) and many more.
- Advocated and collaborated with administrators to introduce formal computer science curriculum to the school, including 2 AP Computer Science A sections.
- Collaborated with administrators and industry mentors from 2K Games to create 4-year computer science and Career-technical education pathway within formal curriculum.

TECHNICAL SKILLS

Languages: Java, Python, C, C++, MongoDB, JavaScript, HTML/CSS, Lua

Frameworks: .NET Core, React, Node.js, JUnit, Material-UI

Developer Tools / Technologies: Git, Microsoft Azure Cloud, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, Unix, Bash Scripting

Game Engines: Unity, Unreal 4, Roblox

Embedded Systems: Arduino, Microchip PIC24

Libraries: NumPy, Matplotlib, OpenCV