# URIEL BARBA



### **EDUCATION**

## University of California, Merced

May 2023

### **Bachelor of Science in Computer Science and Engineering**

3.2 **GPA** 

Relevant Coursework: Data Structures, Algorithms, Web Development, OOP

### TECHNICAL SKILLS

**Languages**: Python, JavaScript, HTML/CSS, C/C++ **Frameworks** & Libraries: React, Flask, SQLAlchemy

Tools & Databases: Git, Supabase, Firebase, Microsoft Office, Figma

Other: PDF.js, Data Visualization, Web Scraping

### **PROJECTS**

### **LiveChat: Video Chat Online**

Feb 2025 - Present

- Developing an online video chat application that connects 100+ random users per day for real-time, anonymous conversations.
- Implementing WebRTC for low-latency, high-quality video and audio with a target of 99% connection stability.
- Integrating matching algorithms to increase user engagement by 20% based on availability and preferences.
- Focusing on a responsive, user-friendly interface for cross-device engagement.

# Twatter: Twitter Clone Web Application

Apr 2023 - May 2023

### **Front End Developer**

- Led a team in the development of a Twitter Clone web application using HTML, JavaScript, Python Flask, and SQLAlchemy, which successfully supported **40+ active users** during its beta release.
- Collaborated with the Front-End team to ensure seamless user experiences and responsive designs, achieving a 98% user satisfaction rate in user testing.
- Deployed a fully functional Twitter Clone web application, showcasing the successful implementation of key features such as
  user registration, login authentication, tweet posting, user search, follow/unfollow functionality, and liking/unliking posts,
  providing users with a comprehensive social media experience. The app was able to handle 100+ concurrent users during
  testing.

#### Front-End Developer: School Gradebook Web Application

Mar 2023 - Apr 2023

- Led a team in developing a School Gradebook web application using HTML, JavaScript, Python Flask, and SQLAlchemy, providing an efficient platform for 200+ students and 15 teachers to manage grades and class schedules.
- Played a pivotal role in the development team as the primary front-end developer, resulting in a user-friendly and efficient interface used by all stakeholders.
- Implemented a secure login system that identified whether the user was a student, teacher, or admin, reducing unauthorized access attempts by 40% and ensuring secure access to respective functionalities.

### **EXPERIENCE**

# Web Developer: Innovate to Grow - Relevance Weighted Meeting Scheduler

Jan 2023 - May 2023

- Developed a web app that improved meeting scheduling efficiency by 30%, allowing 50+ attendees to create schedules with availability ranges and real-time schedule variations.
- Leveraged React, Node.is, and Supabase, delivering a scalable product that supported 100+ concurrent users.
- Adapted to new technologies, incorporating React, Node.js, and Supabase to speed up development by 20%.
- Managed the project roadmap, delegated tasks, and ensured on-time delivery through regular team meetings.

#### **Secure Water Future: Water Hack**

Apr 2023

- Participated in a 48-hour hackathon at UC Merced, tackling water-related issues using data to help better manage California's water resources.
- Worked in a team to explore one of three areas: flood risk, snowpack measurements, or evapotranspiration, aiming for datadriven solutions to balance water supply and demand.
- Gained hands-on experience in interdisciplinary team science and data visualization while working to improve water measurement and management for a sustainable future in California.