# **Brent Brison**

Greater SF Bay Area | brentsworks@gmail.com | LinkedIn | Github | Portfolio

## EDUCATION

### University of California, Santa Cruz

Santa Cruz, CA

Bachelor of Science in Computer Science

June 2023 - June 2025

#### TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript/TypeScript, HTML/CSS, SQL, GraphQL

Software: AWS, Vitest, React, Next.js, Node.js, Express.js, OpenAPI, PostgreSQL, TypeGraphQL,

Tools/Libraries: Docker, Git, MaterialUI, NumPy, Pandas, Scikit-Learn, Matplotlib

#### EXPERIENCE

## Software Engineering Fellow

June 2025 - Present

 $Headstarter\ AI$ 

Remote, USA

- Built and deployed 5 full-stack and AI-powered applications, including a voice-enabled customer support agent, automated insurance claims system, and video intelligence tool for multimodal analysis.
- Collaborated with cross-functional teams to streamline workflows in healthcare and insurance, improving task automation and research efficiency.

### Data Analysis & Research Intern

Sep 2023 – Dec 2023

Mobalytics

Marina Del Rey, CA

- Performed market research as well as data analysis using SQL, Tableau, and Excel to evaluate the competitive landscape of various gaming genres.
- Conducted in-depth analysis of 6 select games across 3 genres, focusing on market trends and player engagement strategies, which informed a prediction of the FPS gaming market size doubling to 40 million USD by 2030

## Cybersecurity Market Analyst

June 2023 – Sep 2023

Interweave Capital

Palo Alto, CA

- Conducted in-depth research on four cybersecurity companies by evaluating their revenue structures and growth prospects, resulting in a comprehensive report that identified future success trends in the cybersecurity industry
- Gained proficiency in technical tools and concepts such as XDR, OSINT, and threat analysis during market research, which improved my ability to assess cybersecurity companies and communicate their technological importance in market dynamics

#### Projects

Aven AI Support Platform | (≈ 25 hours) • Next.js, VAPI, OpenAI, Pinecone, Firecrawl July 2025 – July 2025

- Built a voice-based AI assistant using RAG techniques and VAPI for voice interaction, enabling real-time contextual support with **200ms** average voice response time.
- Automated a data pipeline with Firecrawl, GPT-40, and Pinecone, reducing content by 23% while preserving expertise for high-quality retrieval.
- Optimized embedding workflow to reduce API calls by 77%, improving cost-efficiency and system performance.

# Virtualized Campus Parking System | ( $\approx 60 \text{ hours}$ ) • Next.js, PostgreSQL, Docker

Apr 2025 - June 2025

- Collaborated in a team of 6 developers to build a digital solution for campus parking operations, replacing
  paper-based systems with streamlined online processes for vehicle registration, permit purchasing, and ticket
  management.
- Architected microservice infrastructure using Docker containers with 4 distinct services communicating via REST and GraphQL APIs built with TypeGraphQL and TSOA.
- Integrated third-party services including Stripe for payment processing, Mailgun for email notifications, and OAuth authentication, while implementing internationalization support for English and Mandarin languages.

#### Mobile Mini Facebook Clone | ( $\approx 20 \text{ hours}$ ) • Next.js, MaterialUI, PostgreSQL

Mar 2025 – Apr 2025

- Integrated authentication and data management directly through Next.js Server Actions, eliminating the need for separate API endpoints while maintaining secure user sessions.
- Engineered a mobile-first social platform with core features including personalized news feeds, post creation with emoji support, and multi-stage friend relationship workflows.
- Created a stateless authentication system utilizing secure HTTP-only cookies rather than client-stored tokens.