Will Corcoran

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EDUCATION

University of California, Santa Barbara (UCSB)   Expected: June 2025
Bachelor of Science (B.S.), Computer Science | GPA: 4.0
Regents Scholar (top 2% of admitted students) | College of Engineering Honors | Dean's Honors

WORK EXPERIENCE

Haggard Labs, Fullstack Software Engineering Intern   June 2023-Sep. 2023
- Assisted the launch of *Yopp,* a financial wealth aggregation application, with a focus on user experience and interface.
- Designed an ease-of-use platform for simple addition and relevant analysis with React Native and TypeScript.
- Optimized data writing and retrieval by up to 80% through NoSQL database management.
- Engineered secure serverless functions to retrieve financial data from external entities via RESTful APIs, leveraging Node.js and Firebase Cloud Functions.
- Communicated closely with the oversight team to ensure quality control and align design with strategic objectives.

RESEARCH EXPERIENCE

Dynamo Lab: Dynamic Networks, Student Researcher   Sep. 2023-Present
- Contrasting distances between graph nodes in input space from their respective embedding in latent space.
- Finding node and subgraph outliers, comparing their representations to those produced by other deep learning methods.
- Considering different ways to reduce distortions in embeddings and measuring local dimensionality of such space.
- Practicing fundamental aspects of computer science research through teamwork, problem identification, literature digestion, data analysis, and other practices.
- Collaborating in a team of three with guidance from Dr. Ambuj Singh and grad. mentor, culminating in an end-of-year presentation as a part of UCSB's Early Research Scholars Program.

PROJECTS

FillerAI   Sep. 2023-Present
- Developing an AI player for a strategy game using Minimax with Alpha-Beta pruning algorithms to make quality moves.
- Leveraging Next.js and Flask RESTful API to build an efficient, operative platform for data transfer from frontend (JavaScript) to backend (Python), to ensure solid, dynamic gameplay and proper moves from the AI.
- Harnessing GitHub Actions to merge multiple development and production branches for a smooth distribution process.

Verde   Jan. 2023-Mar. 2023
- Crafted a social media app, *Verde*, with daily environmentally-focused challenges along with photos and user interaction.
- Worked with a team of three others in a team-oriented development process using React Native, Expo, and Firebase.
- Awarded 1st place in UCSB's Google Developers' 2023 Solution Challenge.

Startup Company Success Predictor   Jan. 2023
- Built a predictive model for startup companies based on a holistic view of their founding, funding, and fundamentals.
- Produced a classification model with metric analysis and model training using Scikit-learn, Numpy, and Pandas.
- Increased accuracy by 22% over baseline predictions with careful consideration of parameters.

LEADERSHIP EXPERIENCE

CRU, Real Life, Leadership Committee   Sep. 2023-Present
- Coordinating and planning weekly events, meetings, and dinners.
- Managing club outreach through social media, personal communication, and other forms of marketing.
- Communicating with other students about their beings and purpose.

9929 Records, Independent Label Music Executive   Aug. 2021-Present
- Establishing three artists from the ground up using image and likeness, sound, and social media.
- Creating, producing, and publishing five albums and more than one hundred songs with over 450,000 streams.
- Analyzing trends and data to create a marketing plan for each release and performance.

VOLUNTEERING

Goleta Valley Junior High School, 8th Grade Math Volunteer   Sep. 2022-Present
- Leading a group of five or more students down paths to accomplish classwork and review homework.
- Providing support for instructors of under-performing classes through individualized, targeted instruction.

UCSB, Open House Assistant   Apr. 2023
- Met with prospective students about experience as a computer science student and Regents Scholar.

RELEVANT COURSEWORK

Computer Science: Data Structures and Algorithms, Automata and Formal Languages, Matrices and Numerical Algorithms, Computer Architecture, Compilers, Artificial Intelligence, Object Oriented Design
Mathematics: Differential Equations, Probability and Statistics, Calculus, Multivariable Calculus, Discrete Mathematics

SKILLS

Technical (order of proficiency): C++, Python + various packages, JavaScript, TypeScript, React Native, Firebase, Node.js, Adobe Suite, Java, LaTeX, GitHub, Expo, HTML/CSS, Rust, Solidity, Docker, Django, CompTIA