Evan Gabrielson

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EDUCATION

University of Southern California, Los Angeles, CA — December 2023
Masters of Science in Electrical and Computer Engineering (Machine Learning and Data Science)

University of Southern California, Los Angeles, CA — May 2022
Bachelors of Science in Electrical and Computer Engineering — (Magna Cum Laude) GPA 3.85

Academic Honors: USC Presidential Scholar, Lundquist Scholarship, Viterbi Research Fellow, Viterbi Merit Research Award

RELEVANT SKILLS

Software: Python, C/C++, Javascript, Java, Rust, SQL, Docker, Tensorflow, Kafka, AWS CDK (IaC).
Coursework: Supervised, semi-supervised and unsupervised machine learning, deep learning techniques, applications in natural-language processing and computer vision.

EXPERIENCE

Carbonlink Incorporated, Los Angeles, CA — December 2021–Present

Founder and Chief Technology Officer

- Conceptualized, developed, and launched a SaaS platform catering to over 200 businesses and individuals globally, delivering solutions for improving carbon emission accounting and access to transparent sustainable investments.
- Built a REST API to centralize Carbonlink's core service suite while scaling to gigabyte-per-second data streams for downstream analytics and machine learning. Provisioned AWS resources using the Cloud-Development Kit (CDK) to enable CI/CD, to bolster adaptability through versioning of API architecture and to minimize hours spent migrating business logic by 90%.
- Prioritized data-driven product development by leading team discussions to extract insights gained from customer support tickets and an analytics engine built with AWS CloudWatch, Kinesis Data Firehose, S3, and OpenSearch.
- Negotiated strategic partnerships with 5 industry-leading carbon credit suppliers to expand access to over $40 million in carbon removal and avoidance credits, driving an additional 10% in revenue growth across products in Q2 of 2023.
- Fostered a workplace culture of friendly competition and open communication between team members through internal pitch days, company-sponsored hackathons and bug bounties.
- Recipient of USC TroyLabs Startup Accelerator "Startup of the Year", Contrary Venture's "US College Startup" Champions.

USC Institute for Technology and Medical Systems Innovation, Los Angeles, CA — August 2020—September 2021

Research Scientist in Algorithm Development

- Investigated inefficiencies in existing computational methods for neuron pathway simulation to accelerate research on neurological diseases while reducing animal testing, saving critical research funds and time.
- Employed dynamic programming techniques in Python and Numpy to cache repeated distance calculations during the dataset upsampling step, resulting in a 63% decrease in preprocessing time when upsampling 2 or more times.

Northrop Grumman, Woodland Hills, CA

Software Engineering Intern — May 2021–August 2021

- Adopted a test-driven approach to feature improvement and fault rectification, collaborating with colleagues to build a robust procedure for developing and implementing automated unit tests in MATLAB and Simulink.
- Mitigated the loss of thousands of dollars and harm to aircraft personnel by isolating a mission-critical numerical overflow error in a newly-designed temperature sensor days before its integration in a fleet of upgraded aircraft navigation systems.

Software Engineering Intern — May 2020–August 2020

- Coded a script in IBM Rational Doors DXL to preview and accept changes across tens of thousands of engineering requirements.
- Modernized unit testing with a visual dashboard built in MATLAB to showcase error traces and metrics like failure rate.

Systems Engineering Intern — May 2019–August 2019

- Implemented a simple Kalman filter using a Raspberry Pi and MEM sensors to study and reduce patterned noise.

USC Space Engineering Research Center / NASA CubeSat, Marina Del Rey, CA — August 2019—February 2020

Nano-satellite Battery Subsystems Lead

- Directed hardware design, construction and failure mode testing of a small low-orbit satellite's power system using EAGLE.

LEADERSHIP

"Troy Tones" A Cappella Group, Los Angeles, CA – Vice President & Treasurer — September 2020–May 2022

Harbor House Afterschool Program, Oakland, CA – Math Tutor (Grades 6-12) — January 2019–August 2020