

Owen Sun Zhang

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Education

Boston University, College of Engineering

Boston, MA

B.S. in Computer Engineering, GPA: 3.84

Expected May 2027

- Coursework: Algorithms, Learning From Data, Discrete Stochastic Processes, Computer Organization

Experience

Machine Learning Engineering Intern

June 2026 – August 2026

FreeWheel, Revenue Science

Remote

- Built a Python/SQL temporal backtesting framework on Snowflake and AWS SageMaker to evaluate production CPA models across separate training, calibration, and future-serving windows
- Benchmarked tuned logistic regression against the production neural network across 9 conversion events, improving top-20% lift from 2.72x to 2.88x and ROC-AUC from 0.733 to 0.745
- Designed per-event calibration that reduced mean conversion-ratio error by 97% (6.07 to 0.18) and corrected prediction bias under negative sampling
- Estimated a 5% CPA reduction, equivalent to approximately \$300K/month at constant conversion volume
- Productionized the calibrated model as a TensorFlow SavedModel, validated in live canary auctions

Site Reliability Engineering / DevOps Intern

June 2025 – August 2025

Comcast

Remote

- Migrated the Sprinkler ad-serving platform from EC2/Auto Scaling Groups to Kubernetes on EKS, improving scalability and reliability across multiple environments
- Automated deployment and dynamic scaling with Helm charts, ArgoCD pipelines, and KEDA autoscaling, eliminating manual intervention in scaling workflows
- Partnered with DPE and platform teams on multi-AZ redundancy supporting a 99.99% availability target
- Built standardized metrics and SLO dashboards with Prometheus, Grafana Cloud, and Telegraf sidecars

Website Programmer, Team Lead

January 2023 – August 2023

St. Louis Modern Chinese School (SLMCS)

St. Louis, MO

- Led a 20-person team and built back-end registration workflows for a site serving 1,000+ monthly visitors

Engineering Projects

Autonomous LLM Build-Repair Agent

September 2026 – Present

Microsoft Industry Project

Boston, MA

- Developing an autonomous LLM software-repair agent that diagnoses and fixes compiler, linker, dependency, configuration, and packaging failures across x86_64, ARM/aarch64, and RISC-V
- Building an iterative agent tool loop for repository inspection, hypothesis generation, patching, compilation, and artifact validation inside isolated Docker environments
- Designing reproducible evaluation infrastructure for the ICSE 2027 Build-Bench Challenge, measuring verified repair success, runtime, and LLM token cost

Terrier Motorsport

January 2024 – Present

- Led a 4-person team designing precharge-capable PCBs and reviewed low-voltage systems for safety

Boston University Rocket Propulsion Group

January 2024 – Present

- Contributed to thruster design and presented preliminary and critical design reviews for build approval

Technical Skills

Languages: Python, C++, SQL, Java, MATLAB

ML/Data: TensorFlow, TensorFlow Serving, scikit-learn, LightGBM, pandas, NumPy, Snowflake

Systems/Cloud: Docker, Kubernetes, AWS (SageMaker, S3, EKS), Terraform

Developer Tools: Git, Helm, ArgoCD, KEDA, Prometheus, Grafana

Certification: AWS Certified Solutions Architect – Associate (December 2023)