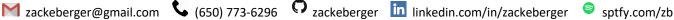
ZACHARY BERGER









Graduating CS major with varied industry experience looking for role as applied scientist, data scientist, or ML engineer. I have diverse interests including computer vision, quantum computing, bioinformatics, and autonomous music creation.

EDUCATION

2018 - 2022University of California, Los Angeles (UCLA)

4.00 GPA | B.S. candidate in Computer Science, Mathematics concentration.

Courses — Operating Systems, Data Structures & Algorithms, Intro to ML, ML in Bioinformatics, Quantum Computing, Deep Learning & Neural Networks, Network Fundamentals, Real Analysis, Linear Algebra, Probability, Multivariable Calculus, Discrete Math.

WORK EXPERIENCE

2021 **Amazon**, Seattle – *Software Engineering Intern* Designed and built a native AWS application to supply up-to-date login information for multi-factor authentication challenges. o Obtained a detailed understanding of AWS services (i.e., compute & storage) to make intelligent design decisions in a cloud computing environment. 2021 **Tesla**, San Francisco – *Data Science Intern* Wrote and scaled a data quality detection algorithm using Scala to operate on Tesla's multi-petabyte vehicle dataset. o Program ensures data robustness in Tesla's Insurance & Prognostics services. Built data pipeline using Airflow to periodically deploy algorithm on a distributed Spark cluster, then update results/visualizations in Superset. 2020-**UCLA Vision Lab**, Los Angeles – Research Intern Developed novel algorithm to optimize adversarial attacks against stereo matching networks. Showed robust neural network architectures for depth prediction. Aided with experimental design and led project implementation. 2019 **MobiTV**, San Francisco – *Software Engineering Intern* Built a multithreaded developer app for scalable management of many Git repos. Automated configuration of Varnish caching software. Set up CI/CD workflow using GoCD. Added fully automated testing and developed a separate program for rapid generation of new tests. 2015 **INTL FCStone**, New York City – *Research Intern* Researched and reported on the implications of Green Bonds for a Fortune 500 financial services company. Shadowed operations of each department.

PROJECTS

2020 **Quantum Computing**

Implemented 6 quantum algorithms in Cirq and Qiskit. Deployed and ran code on several IBM QCs and Google Sycamore, with extensive experimental analysis.

2020 **Predicting Synapse Connections**

Applied classical ML methods to predict synapse connections in fly brain structure.

TECHNICAL SKILLS