

Edwin Zhang

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Education

University of California Santa Barbara, California

September 2019 – June 2023

Master of Science and Bachelor of Science Computer Science

GPA: 3.96

Graduated top of class with B.S at age 19

Regents Scholar (top 2.5% of school), College of Engineering Honors Student

Relevant coursework: Game Theory, Statistical Machine Learning, Intro to Data Science, Convex Optimization, Intro to Deep Learning, Special Topics in Deep Learning

Palomar Community College, San Marcos, California

September 2018 – June 2019

GPA: 4.00

Concurrent enrollment with Westview High School.

Relevant coursework: Multivariable Calculus and Differential Geometry, Linear Algebra

Westview High School, San Diego, California

September 2018 – June 2019

GPA: 4.00

Graduated top of class at age 16

Research Experience

Language augmented diffusion models in RL (Professor Amy Zhang, Yujie Lu, Professor William Wang)

July 2022 – Present

First author

- Proposed and created language conditioned diffusion RL models, enabling generalization in control through large language models
- Led several meticulous experiments comparing baselines and ran large scale training with SLURM on distributed FAIR cluster
- Wrote up results in research paper, accepted at Language and Reinforcement Learning Workshop NeurIPS 2022

Offline RL with Closed Form Policy Improvement Operators (Jiachen Li, Ming Yin, Professor William Wang)

Sept 2021 – May 2022

Co-first author

- Designed rigorous alternative method for solving policy improvement in closed form through Taylor Approximation
- Led technical implementation and experiment running, creating a multiprocess RL research framework with over 15000 lines of Python designed for quick iteration and highly performant training. Accepted at Offline RL Workshop Neurips 2022

Employment History

MIT-IBM Watson AI

Visiting Researcher

December 2022 – Present

- Working with Chuang Gan

Meta

Research Intern

July 2022 – September 2022

- Proposed, analyzed, and deployed new group page configuration reducing misinformation by 4%, improving the experience of 3 million daily active users
- Created new facebook post ranking model with 17% gain on offline engagement area under curve (AUC) metrics

Plato Systems

Computer Vision and Software Engineering Intern

June 2021 – June 2022

- Developed multiple view calibration pipeline through planar homographies and OpenCV
- Created set up process and capture script for NVIDIA Jetson platform with multiple third party imaging providers
- Designed and led benchmarking of several potential imaging candidates in low light, high light, and no light settings

Allthenticate

Lead Fullstack Engineer/First Hire

January 2020 – June 2021

- Led development on cloud platform in early stage startup, architecting scalable and flexible REST API from scratch
- Taught advanced Vue JS by taking complete responsibility at each step of the development phase – delivered a full web application while teaching and leading two other interns working on the same project
- Built and deployed python backend with over 27000 lines to use Elastic Beanstalk, implementing dockerized development process to speed up iteration cycles by 25%

Awards and Honors

Outstanding research award in Language+RL Challenge at NeurIPS, 2022

First out of 78 in Startup Category at SDhacks, 2021

First out of 16 in React Category at SBhacks, 2022
Distinction in the Major: Research Track, 2022
Best use of Google Cloud out of 71 at SBhacks, 2021

First out of 70 in Database Category at SBhacks, 2020
Second out of 85 in AI classification at UCSB, 2020
Regents Scholar UCSB, 2019