

# Alexander Chin

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## EDUCATION

### University of California San Diego

*B.S. in Mathematics-Computer Science*

*B.S. in Cognitive Science, Specialization in Machine Learning*

Sep 2025 – Jun 2028 (Expected)

*La Jolla, CA*

### City College of San Francisco

*A.S. in Mathematics — Highest Honors*

Aug 2024 – May 2025

*San Francisco, CA*

## EXPERIENCE

### Essenergy

*Software Engineer (Contract)*

May 2026 – Present

*Milpitas, CA*

- Develop backend automation services integrating CommerceHub, Shopify, and ShipSage APIs to automate order fulfillment and reduce processing time to under 3 minutes for 30+ weekly orders.
- Building a serverless AWS workflow with Lambda, Step Functions, MongoDB, and Amazon S3 featuring automated retries, failure notifications, fallback handling, and document storage for shipping labels and related artifacts.

### IDX Exchange

*Data Analyst Intern*

Jun. 2026 – Present

*Remote*

- Developed Python ETL pipelines to ingest, clean, and transform over 60K property listings monthly, performing feature engineering to derive market indicators, pricing trends, inventory dynamics, and neighborhood-level metrics.
- Engineered feature extraction and outlier detection pipelines to identify anomalous listings and generate actionable market intelligence reports; Deployed interactive Tableau dashboards that visualize KPIs and regional housing trends.

### UCSD Visual Learning Lab

*Undergraduate Research Assistant*

Mar 2026 – Present

*La Jolla, CA*

- Wrote Python/Bash pipelines to process webcam gaze data from asynchronous online trials, orchestrating automated gaze encoding and computing target-looking embeddings on external GPU Cluster for downstream analysis.
- Current maintainer of an internal Python package for generating and analyzing CLIP/DINO image embeddings on GPU cluster infrastructure, adopted across 4 lab projects with documented APIs and Jupyter notebooks.

### Association for Computing Machinery at UCSD

*Projects Event Director*

May 2026 – Present

*La Jolla, CA*

- Apart of the Projects division, hosting mid-term standups with 20+ student-led technical product teams per year across AI, Software Engineering, and Design to check in on progress, unblock issues, and keep teams on track toward their milestones.
- Design and execute technical workshops for 100+ program participants, hosting quarterly project showcases to drive student engagement and industry networking.

### National Aeronautics and Space Administration

*Community College Aerospace Scholar*

Jan 2025 – Apr 2025

*Remote*

- Served as Communications Lead for a distributed 11-member team, spearheading cross-functional coordination for a Mars exploration mission concept presented to engineers at NASA Goddard Space Flight Center.

## PROJECTS

### ClassGraph — Course Planning Webapp | *React, TypeScript, D3.js, Python, Go, PostgreSQL*

- Shipped a full-stack course visualization app utilized by 100+ UCSD students; awarded 1st place out of 12 teams in a quarterly competition judged by Data Science faculty and industry engineers.
- Built recursive data pipelines in Python and Go to model 5,000+ course prerequisites as nested AST trees, implementing cycle detection, depth limiting, and regex normalization for production stability.

### SafeStreets — Agentic Street Safety Platform | *Claude API, Browserbase, Redis, React, Python*

- Winner of the Best Use of Claude Track at CalHacksAI 2026
- Shipped a hazard detection pipeline using Claude vision to analyze satellite/Street View imagery, independently corroborating findings against crash records, 311 complaints, and council documents to produce evidence-backed safety reports.
- Wired Fetch.ai uAgents with Browserbase to scrape JS-rendered sources alongside open data APIs, caching per-intersection results in Redis to surface fix recommendations, grant matches, and auto-drafted civic outreach.

### WebReg-to-ICS — Schedule Conversion Tool | *Python, FastAPI, PyMuPDF, JavaScript, Vercel*

- Built and deployed a full-stack tool that converts UCSD WebReg schedule PDFs into standards-compliant .ics calendar files, with a browser-based weekly preview and one-click import into Google/Apple/Outlook calendars.
- Engineered a PDF table-extraction pipeline with PyMuPDF to parse lectures, labs, discussions, midterms, and finals into recurring calendar events, automatically excluding university holidays; deployed as a serverless FastAPI backend on Vercel.

## TECHNICAL SKILLS

**Languages:** Python, Java, Go, SQL, TypeScript/JavaScript, Bash

**Frameworks & Tools:** React, FastAPI, PyTorch, AWS, Docker, Git, PostgreSQL

**Coursework:** Data Structures & Algorithms, Machine Learning, Linear Algebra, Probability & Statistics