

EDUCATION		
•	University of California, Berkeley	Berkeley, CA
	<i>BA - Applied Math, Computer Science, Physics Minor; GPA: 3.86</i>	<i>Class of 2028</i>
	<i>Courses: CS 61A, Math 110 Abstract Linear Algebra, Math 55 Discrete Math, Data 8, Physics 5A</i>	
•	Burnsville High School	Burnsville, MN
	<i>GPA: 3.99</i>	<i>Sep 2021 - Jun 2025</i>

SKILLS SUMMARY

• Languages:	Python, C/C++, Java, TypeScript/JavaScript, SQL, HTML/CSS, LaTeX
• Technologies:	Git, PyTorch, OpenCV, Node.js, React, Next.js, Supabase/PostgreSQL, OpenAI API, Vercel
• Concepts:	Algorithms & Data Structures, API Design, Debugging, Testing, System Design, LLM Prompting & Evaluation

EXPERIENCE

•	Morgenstern	Berkeley, CA
	<i>Computer Vision Intern</i>	<i>Jun 2026 - Present</i>
	◦ Building a C++/OpenCV image-stitching pipeline that merges 6–12 overlapping photos into a single high-resolution composite using SIFT feature detection and RANSAC homography estimation	
	◦ Designed a two-stage stitching strategy, column-wise pairwise merges followed by a panorama-level combine, to improve alignment robustness across images of varying dimensions	
	◦ Architected the C++ core behind a clean ANSI C API with a 5-state status-code error model, driven by a lightweight command-line front-end	
•	Stanford NLP Group	Stanford, CA
	<i>Research Intern</i>	<i>Jun 2026 - Present</i>
	◦ Developing a mechanistic-interpretability method that generates fluent, human-readable text to maximally activate any of the 458k MLP neurons in Llama-3.1-8B-Instruct, adapting the LARGO latent-space optimization method to neuron interpretation	
	◦ Engineered a crash-safe, sharded multi-GPU pipeline with atomic work-stealing across 7 A40 GPUs to benchmark 2,000 neurons, reaching 80–90% of each neuron’s activation ceiling with zero data leakage, a +13-point gain from iterative re-seeding	
•	ML4GW Group, University of Minnesota	Minneapolis, MN
	<i>Machine Learning Researcher</i>	<i>Jun 2026 - Present</i>
	◦ Developing a neural embedding for AMPLFI, an open-source normalizing-flow framework that infers 11 gravitational-wave source parameters from LIGO detector strain in seconds rather than the hours required by traditional Bayesian samplers	
	◦ Implementing a time-frequency Q-transform representation with a 2D ResNet encoder in PyTorch, contributing to an open-source codebase under Git and training across multi-GPU A100 nodes on the NCSA Delta cluster via Slurm	
•	Undergraduate Laboratory at Berkeley	Berkeley, CA
	<i>Researcher</i>	<i>Sep 2025 - Present</i>
	◦ Built an LSTM model in PyTorch to predict the future brightness of gravitational microlensing events, achieving $R^2 = 0.69$ on 9,738 real light curves from the OGLE astronomical survey	
	◦ Engineered a data pipeline to filter 19,236 raw curves spanning 11 years of survey observations using custom heuristics, validating against hand-labeled data with 94% recall	
•	Rubik’s Cube DeCal	Berkeley, CA
	<i>Lead Instructor</i>	<i>Jan 2026 - Present</i>
	◦ Teaching 40+ students, translating complex technical material into clear explanations and providing detailed written feedback on assessments	

PROJECTS

•	Oski’s Forkast UC Berkeley Dining Hall Recommender	Feb 2026 - Present
	◦ Building a fullstack Next.js PWA that ranks UC Berkeley dining halls using a custom weighted scoring algorithm over real-time XML menu data, deployed on Vercel with Supabase Auth and PostgreSQL cloud sync	
	◦ Implementing offline-capable service worker caching, JWT-authenticated API routes, and debounced cloud sync with conflict resolution for cross-device data merging	
•	ChessBlitz	Jan 2026 - Present
	◦ Building a mobile app that generates adaptive chess puzzle hints using the OpenAI API, engineering prompts with board state and puzzle metadata to produce difficulty-aware coaching responses	
•	Hypixel Skyblock Automation Mod	Nov 2022 - Sep 2023
	◦ Built and open-sourced an event-driven JavaScript mod for a popular Minecraft server, using regex parsing of the live chat stream to drive real-time automation, notifications, and nearest-point routing across 5 modules	

HONORS AND AWARDS

•	2x Finalist at Rubik’s North American Championship	<i>Jul 2024, 2026</i>
•	34th of 20,000 in the world for Square-1 Rubik’s puzzle	<i>Jun 2025</i>
•	5x FIRST Robotics State Qualifier, multiple judge’s awards	<i>Sep 2019 - May 2025</i>