Nicolás Kennedy

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Education

Stanford University — Stanford, CA
M.S. Computer Science — *Sep. 2025 – June 2027*

University of California, Davis — Davis, CA
B.S. Computer Science & Engineering: GPA 3.98/4.00 — *Sep. 2022 – June 2025*

Experience

SDE Intern — June 2025 – Sep. 2025
Amazon — *Bellevue, WA*

- Reduced team-members' on-call load using RAG and chain-of-thought reasoning for LLM ticket automation
- Integrated ticket automation w/ Bedrock and TypeScript Lambdas hooked into Kendra with REST entry-point
- Designed accessible React chat-bot UI backed by RESTful microservice, iterating with customer feedback
- Accelerated team's development process, writing MCP servers in custom Lambda transport to aggregate internal Wiki

Research Intern — Sep. 2023 – June 2025
University of California, Davis (Dr. Ian Davidson) — *Davis, CA*

- **Paper acceptance to TMLR 2025 (CXAD: Algorithms, Complexity Results and Experiments)**
- Mitigating statistical bias across protected status values in popular datasets to reduce systemic harm
- Paper under review at NeurIPS 2025: deep-learned fairness functions to detect intersectional unfairness criteria
- Invented and formalized novel unsupervised systems that explain clusters using integer linear programming with convolutional variational auto-encoders, validated with experiments in PyTorch

SDE Intern — June 2024 – Sep. 2024
Amazon Web Services — *Santa Clara, CA*

- Added network switch deployment metrics to main datacenter logging system using StepFunction and revamped React dashboard
- Leveraged OpenSearch to implement scalable NoSQL ingestion schemas for all of Amazon's datacenter switch configuration data
- Reduced technical debt of Web SaaS dashboard by proactively migrating entire JavaScript UI codebase to TypeScript

Research Intern — May 2021 – Aug. 2021
Massachusetts Institute of Technology (MIT) (Dr. Arvind Satyanarayan) — *Cambridge, MA*

- Implemented Qualtrics API in Python to automate ML training data generation from research surveys
- Built Python tooling for assembling corpus of accessibility benchmark data to help visually disadvantaged people interpret statistical charts
- Developed workaround solutions with Bash for running Docker NLP models in batch on outdated HPC Linux infrastructure

Projects

Deskercise Pro | *React, TypeScript, Firebase, AWS, PostgreSQL* — Jan. 2025 – June 2025

- Architected an exercise reminder app to minimize repetitive strain injury and maintain physical health
- Led colleagues, making key business decisions and engineering tradeoffs with timely delivery for busy client doctor

Multiplayer Scalable Board Game | *Rust, Yew* — 2020

- Created a multiplayer rendition of the classic board game *Go* entirely in Rust
- Frontend written in Rust with Yew, multithreaded backend written from scratch with async Rust

Technical Skills

Academic Strengths: Deep Learning, Integer Linear Programming, OS Design, Computer Architecture
Languages: Rust, JavaScript/TypeScript, Java, Python, C/C++, Scheme, SQL, HTML/CSS
Frameworks: PyTorch, Keras, React, Node.JS, AWS, Firebase
Currently Learning: CUDA, Haskell, Verilog, Modern Algebra