DANIEL COHEN

(954)-294-6253 | danieljcohen0@gmail.com | github.com/danieljcohen | linkedin.com/in/danielcohen0 | daniel-j-cohen.com

SUMMARY

Creative problem-solver with strong technical skills and industry experience as a software engineer at Amazon and Esri. Currently studying statistics and computer science at Duke University, with a track record of delivering full-stack applications to production and solving problems that directly impact users.

EDUCATION

Duke University **Aug 2022 – May 2026**
B.S. in Computer Science, Concentration in A.I. | *Minor in Statistical Science* | *Minor in Economics* Durham, NC
GPA: 3.93/4.0 | Dean's List with Distinction | Alpha Kappa Psi Business Fraternity | Quantitative Finance Club
Relevant Coursework: Data Structures & Algorithms, Computer Architecture, Machine Learning, Bayesian Statistics

WORK EXPERIENCE

Amazon (AWS) **May 2025 – Aug 2025**
Software Engineer Intern New York, NY
- Redesigned the Playwright-based integration test architecture for Federated Connections on the SageMaker Unified Studio team, reducing test flakiness and on-call workload by 93%
- Built scalable infrastructure using AWS CDK to support additional connectors, deploying Amazon-hosted databases, test data, and a secret replicator for third-party credentials across regions
- Expanded test coverage by 400% while reducing testing costs by 12%, enabling broader, more efficient testing

Esri **May 2024 – Aug 2024**
Software Engineer Intern Redlands, CA
- Developed a Python-based solution to automatically classify room types in indoor buildings using OCR and geometry
- Utilized an ensemble method combining Keras, Tesseract, and MMOCR with an algorithm to unwarp text in 360-degree photos, achieving a 38% increase in text extraction accuracy and a 27% increase in positioning accuracy

Duke University – Biomedical Engineering Research **May 2024 – April 2025**
Software Engineer Remote
- Implemented and optimized a suite of Python-based analysis tools on the Duke Compute Cluster, integrating methods for cell segmentation, data normalization, and cellular neighborhood analysis

Goliath Data AI **March 2024**
Software Engineer Intern Remote
- Created a web-based tool for real estate rehab analysis, offering interactive calculations and CSV export functionality
- Developed client-side functionality using TypeScript and React.js, enabling dynamic updates and reducing server load

PROJECTS & TECHNOLOGIES

Languages: C/C++, HTML/CSS, Java, JavaScript, LaTeX, Python, R, TypeScript
Technologies/Frameworks: Firebase, Keras, MongoDB, MySQL, NumPy, PostgreSQL, Pytesseract, Pytorch, React.js

PsychAIde – Demo **Jan - May 2025**
- Led full-stack development of PsychAIde (Next.js, React, TypeScript), delivering a HIPAA-compliant case management platform adopted by 30+ professionals
- Added PostgreSQL cursor-based pagination, loading 25-record pages and cutting average response times by 70%

Path & Petal – GitHub **Feb 2025**
- Developed a platform for hikers to identify, report, and learn about invasive plants, placing 2nd at HackDuke 2025
- Implemented lazy-loaded client-side clustering of OpenStreetMap markers, reducing initial map load times by 60%

ArcGIS Care – GitHub **Jul 2024**
- Developed an app to track medical equipment via cameras, presented to 550+ attendees in the hackathon finalist round
- Trained a YOLOv8 model to track gurneys and crash carts, achieving 91% accuracy within a 15-foot range

OCR Linear Algebra Calculator - GitHub **May 2024**
- Created a command line based Python tool to solve matrix problems from images in a without external math libraries

Logisim CPU **Dec 2023**
- Designed and implemented a 16-bit CPU with 9 functional units, including ALU, control unit, and registers
- Integrated a set of 16 instructions into the CPU, enabling complex arithmetic and logical operations

SKILLS

Skills/Certifications: Spanish (Conversational), Sandler Sales Training Bronze Certified, Duke Investment Training Certified