Kaden Gruizenga

kgruiz@umich.edu • linkedin.com/in/kadengruizenga/

EDUCATION

UNIVERSITY OF MICHIGAN **Ann Arbor, MI**

College of Engineering

Bachelor of Science in Engineering, Data Science, May 2027

- Double minor in Math and Economics
- GPA: 3.52/4.00 | SAT: 1540/1600
- Coursework: Data Mining, Probability Theory, Combinatorics, Data Structures & Algorithms, Linear Algebra, Discrete Math, Multivariable Calculus
- National Merit Finalist ($<1\%$), AP Scholar with Distinction (3x), HS Valedictorian
- Other Activities: Scholars of Finance

PROJECTS

Trading Signal Classifier *Python, Pandas, Keras, Scikit-learn*

- Engineered 60+ microstructure-based features (e.g., weighted OBI, Depth Ratio) from Level 3 SGX A50 Futures data.
- Parsed order book from tick-level updates, handling cancellations and matching.
- Applied LSTM and ensemble models in a rolling-window pipeline for short-term classification.
- Refactored into modular pipeline; building realistic backtesting w/ PnL, Sharpe, drawdown.

LSTM Trace Analyzer (Keras) *Python, TensorFlow, Plotly*

- Built tool to parse Keras trace logs and generate interactive call graphs of model internals.
- Surfaced execution bottlenecks during LSTM training; enabled debugging of black-box ops.

LLM Summarization Pipeline *Python, Gemini API, GCV*

- Created a tool to ingest, OCR, and summarize lecture slides, documents, videos, and PDFs.
- Combined Gemini API, OCR, and prompt chaining to generate structured multi-format notes.

EXPERIENCE

CONTRACTOR AT MULTIPLE STARTUPS **Grand Rapids, MI**

Incoming Agentic AI Deployment Intern Summer 2025

MERCANTILE BANK OF MICHIGAN **Grand Rapids, MI**

Automation Intern in Internal Audit Summer 2024

- Designed and implemented automation solutions to optimize the audit process, cutting processing times by 98% from over 111 minutes to under 3 by streamlining workflows, eliminating repetitive tasks, and enhancing data accessibility, allowing more people to independently conduct analysis.
- Developed robust software-driven frameworks to systematically review $731M in high-value assets, including agency bonds, CMOs, MBS, and municipal bonds, ensuring strict compliance with board policies and automating precise interest recalculations on $58M in subordinated notes.
- Conducted extensive testing of loan system enhancements, authentication mechanisms, and distressed loan tracking software, identifying critical compliance gaps and ensuring seamless and reliable system performance across $166M+ in commitments and $146M+ in book balances.

GLOBAL INVESTMENTS COMMITTEE **Ann Arbor, MI**

Technology Desk Head 2024–Present

- Advocated for a long on Perion Network (NASDAQ: PERI) following market overreaction to Microsoft Bing's advertiser pullback and Google's AI search evolution. Emphasized AI-powered ad tech (SORT, WAVE), diversification into CTV/DOOH, and strong balance sheet with $374M net cash. Projected 200%+ upside through DCF analysis, reverting to historical market multiples.
- Pitched PDF Solutions, focusing on its shift to subscription model, AI-driven analytics, and offerings like Design-for-Inspection (DFI) and Exensio, backed by 160+ patents and strong history with major semiconductor firms. Projected 30.4% upside through DCF analysis.

ADDITIONAL

- Fluent in Python, C++; proficient in Go, R, LaTeX
- Adventure traveler; passionate about Formula 1, skydiving, and McLaren/Hennessey cars
- Trombone player in marching/jazz band; skilled in Michigans fight song and Phantom theme