Ethan Karpeles

Dallas, Texas, USA www.linkedin.com/in/ethankarpeles

PROFESSIONAL PROFILE

AI & Software Engineer at PMG and award-winning Mathematics graduate from the University of North Texas. Bilingual in English and Spanish.

PROGRAMMING LANGUAGES

Python | SQL | C++ | C | JavaScript | Java | HTML | CSS | LaTeX

SOFTWARE

Git | GNU/Linux | Excel

LANGUAGES

English (Native) | Spanish (Bilingual)

EXPERIENCE

PMG — Dallas, Texas, USA

AI & Software Engineer I — 2026 – Present

- Currently participating in the Graduate Leadership Program for AI & Software Engineering.

AI & Software Engineering Intern — Summer 2025

- Deployed AI-driven dashboards, flagging major service issues and performance bottlenecks for proactive engineering resolution. Presented the final product to senior executives.
- Developed automated Jira issue ingestion workflows and integrated OpenAI embeddings with KMeans clustering to enable ML-based ticket classification.
- Engineered and documented Python scripts for BigQuery table management, streamlining internal data pipelines and eliminating manual credential hurdles.

EDUCATION

Bachelor of Science in **Mathematics** — GPA: 4.0

Minor in Computer Science — 2021 – 2025

University of North Texas, Denton, Texas, USA

RELEVANT COURSEWORK

Mathematics

Numerical Analysis | Graph Theory | Linear Algebra | Applied Statistics | Differential Equations | Calculus I–III | Graduate-Level Elliptic Curve Seminar | Real Analysis I and II | Abstract Algebra | Topology

Computer Science

Cryptography (Python & C++) | Applied Artificial Intelligence (Python) | Foundations of Data Structures (C++) | Foundations of Computing | Computer Science I and II (C++)

HONORS & AWARDS

Outstanding Undergraduate Mathematics Student of the Year, UNT Math Department — 2024

President's List — Spring 2024

RESEARCH EXPERIENCE

University of North Texas — Denton, Texas, USA

Undergraduate Research Fellowship — 2024 – 2025

- Wrote a Python program to identify families of elliptic curves with semistable reduction modulo any prime.
- Gave a talk in a full auditorium for the entire math department and presented a poster at UNT's Scholars Day.

LEADERSHIP EXPERIENCE

President, Alpha Epsilon Pi, UNT — 2024 – 2025

- Elected to lead a 20-member chapter, overseeing operations, recruitment, community service initiatives, and the management of a $28,000 annual budget.

Vice President, Math Club, UNT — 2024 – 2025

- Assisted in the leadership of an academic organization to foster a deeper interest in mathematics for students.