Trent Wiles

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Available from January-August 2026 anywhere in the United States & Canada

EDUCATION

Northeastern University — Khoury College of Computer Sciences — Boston, MA
Candidate for Bachelor of Science in Computer Science and Criminal Justice — *August 2023 — Present*

- GPA: 3.7/4.0; Dean's List for all semesters; expected graduation: May 2027
- Clubs & Organizations: ACM Chapter, Content Club
- Relevant Coursework: Object-Oriented Programming, Database Design, Software Development, Algorithms & Data Structures, Introduction to Math Reasoning, Discrete Math, Networking Fundamentals

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, HTML/CSS, Go, C, Kotlin
Frameworks: Node.js, Flask, ExpressJS, React, WSGI, JUnit, Jest, JQuery
Databases: MySQL, PostgreSQL, SQLite, MongoDB, Redis
Tools: Git, GitHub, Bash, Linux, Notion, LaTeX, Docker, DigitalOcean, Caddy, Apache2, Nginx

PROJECTS

Trace TL;DR | *Python, Flask, MongoDB* — November 2024

- Built an automated pipeline to ingest and summarize hundreds of daily teacher evaluations using Python, BeautifulSoup, and Google's Gemini API, storing processed data in MongoDB for instant student access
- Designed a full-stack platform that transformed hours of professor research into seconds, attracting 150+ daily active users and validating strong product-market fit

Sit Down And Study | *JavaScript, React, Google Gemini* — October 2024

- Collaborated with a teammate to build an interactive learning platform where users master CS concepts through AI-generated explanations, then validate understanding by solving LeetCode-style coding problems
- Engineered a full-stack application using Express.js, React, Judge0, and MongoDB that generated personalized concept explanations via OpenAI's API and automatically validated code submissions in real-time
- Attracted 85 unique users who collectively generated 340+ practice questions and placed among top winners

RAG Pipeline Metrics | *Python, gRPC, PostgreSQL, Clickhouse, Cassandra, OpenSearch* — June 2025

- Partnered with NetApp Instaclustr in a team of 8 during Northeastern's Software Engineering in Australia program to design a RAG pipeline using Mistral 7B that benchmarked query latency across four distributed database backends
- Developed scalable FastAPI microservices for document ingestion and embedding generation, leveraging gRPC for modular inter-service communication in a fast-paced Agile environment
- Optimized document processing pipeline using SPECTER2 embeddings to achieve 10,000 documents per hour throughput, demonstrating production-grade scalability for scientific PDF ingestion

HackerNews Clone | *Go, React, TypeScript, PostgreSQL, Docker* — July 2025

- Built a production-grade HackerNews clone with magic link authentication, submission/comment posting with reCAPTCHA v3 protection, and community moderation flagging, deployed via Docker and Caddy
- Implemented full voting and sorting systems, user customization features, and comprehensive HTTP/business logic logging to enable 2,000+ monthly active users
- Engineered a Go backend and React/TypeScript frontend using ShadCN components, achieving sub-100ms API response times and support for 500+ users in production

Flag | *PHP, MySQL, Apache, Cloudflare* — December 2020

- Built a video sharing platform enabling users to upload, stream, and rate videos with a MySQL database backend and PHP server-side rendering, achieving 240+ hosted videos and 100 concurrent users
- Self-hosted the application on Ubuntu Linux using Apache HTTP Server on a home network while leveraging Cloudflare for video caching and content delivery, demonstrating early DevOps and infrastructure management skills

EXPERIENCE

Kaleidoscope at Khoury College — September 2025 - Present
Software Engineer

- Collaborated with the software team to manage AWS resources for Northeastern Kaleidoscope, a club council overseeing 50+ student organizations funded by Khoury College
- Partnered with the operations team to automate Slack notifications integrated with Google Sheets, streamlining communication across 10,000+ dollars in annual club distributions

Guilford Racquet and Swim Club — May 2021 – August 2023
Junior Tennis Pro

- Delivered quality tennis coaching to children ages 4-15 and ran private lessons
- Addressed parent questions and concerns; tailored lessons to reflect conversations

INTERESTS

Cycling, Traveling, Urban Exploration, Tennis, Kayaking