# Trenton vonHartitzsch

New York, New York, United States ■Trentonvonh@gmail.com □918-407-0287 in/trenton-vonhartitzsch ● trentonvonH.com

# **EDUCATION**

New York University New York, NY

Bachelor of Arts in Computer Science and Data Science

Expected December 2025

Major GPA: 3.74

Varsity Athlete: Captain of the NYU Men's Varsity Swim Team, 22+ hour commitment per week

#### **EXPERIENCE**

LD Kerns Contractors

Tulsa, OK

Technology Specialist Intern

June 2024 – February 2025

- Spearheaded migration of a WordPress site to a Flask + React stack, slashing page-load times by 30% and boosting team
  adoption by 80%.
- Automated weekly PostgreSQL backup and restore workflows with Python scripts, cutting manual maintenance by 15 hours per month
- Wrote and maintained Python tooling for server health checks, reducing incident response time by 50%.

Web Developer Tulsa, OK

Self-Employed

May 2022 - Present

- Designed and deployed responsive websites for 8+ small-business clients using HTML, CSS, and JavaScript, increasing average session duration by 24%.
- Built reusable React components to engineer responsive front-end experiences with HTML, CSS, and JavaScript
- Conducted SEO audits and executed on-page optimizations (meta-tags, schema, load-speed), driving organic traffic up 40% in three months.

# **PROJECTS**

#### **Clinical Named Entity Recognition Platform**

May 2025

- Architected an end-to-end clinical entity workflow—streamlining data parsing, BIO tagging, and distributed tokenization—resulting in a 75% cut in data-prep latency and 3× faster model convergence.
- Fine-tuned Bio\_ClinicalBERT with layer-wise decay and adversarial training, lifting entity F1 from 0.78 to 0.87 (+12%) and reducing false positives by 15%.

# **Sentiment-Driven Quantitative Trading Strategy**

November 2024

- Developed a comprehensive quantitative trading strategy combining sentiment analysis, correlation modeling, and signal
  generation to forecast equity movements linked to commodities.
- Built a multi-model sentiment analysis pipeline and integrated outputs into a PostgreSQL database for efficient querying and analysis.
- Produced daily ML-driven trade signals based on sentiment forecasts—achieving a 65% hit rate and 4% annualized outperformance vs. benchmarks.

RentRoute August 2024

- Built a full web application to match users with NYC rental properties based on commute times, utilizing React.js, Flask, and the TravelTime API for real-time data integration
- Implemented ML-driven ranking in Python, increasing top-3 recommendation relevance by 35% and delivering interactive Folium maps with Seaborn analytics.

# **Spotify Song Data Analysis**

April 2024

- Analyzed over 20k Spotify song data using Python, Pandas, and Scikit-Learn to identify patterns, boosting population prediction accuracy to 88% and delivering top-5 trend-driving factors to artists.
- Engineered 20+ audio features and ran grid search across algorithms—raising R<sup>2</sup> from 0.45 to 0.68 on test sets

# **SKILLS**

Frontend: HTML, CSS, JavaScript, React.js

Databases & Storage: PostgreSQL, MySQL

Backend: Python, Java, Django, SQL, Flask

Tools & Platforms: Git, Docker, RESTful API, Web Scraping