

Kevin Durand

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EDUCATION

Columbia University, The Fu Foundation School of Engineering and Applied Science
Bachelor of Science - Major: Computer Science, GPA: 3.8

New York, NY
Sept 2022-May 2026

WORK EXPERIENCE

Columbia Computer Science Department

New York, NY

Student Teaching Assistant

September 2025 - Present

- Assisted in teaching Advanced Programming in the C programming language
- Held weekly office hours to support students in understanding the course material
- Collaborated with professor and other TA to grade and review coursework

Voloridge Investment Management

Jupiter, FL

Research Software Engineer Intern

June 2025 - August 2025

- Develop new features and enhanced legacy functionality of the existing quantitative finance algorithms
- Optimize existing C++ algorithms in through performance analysis and benchmarking to improve runtime performance
- Researched new algorithms to refactor existing codebase features to improve scalability and reduce tech debt

Columbia History Lab

New York, NY

Student researcher

September 2024 - May 2025

- Created graph based database from 127 years of US diplomatic relations, extracting relationship triplets and linking metadata
- Implemented RAG model to retrieve information from knowledge graph implemented in Neo4j and Python
- Implemented user interface for access to AI model pipeline.

Data Annotation Tech

New York, NY

Freelancer

May 2024 – August 2024

- Trained LLM models by evaluating outputs of different models to improve selection criteria and produce better models
- Identified errors in LLM models output and corrected code in a variety of languages including Python, C, C#, Go, Java
- Reported biases and marked hallucinations from LLM models

RELEVANT PROJECT EXPERIENCE

RootDB

New York, NY

Project Lead

January 2025- May 2025

- Created open-source embedded relational database following standard SQL specification
- Implemented database built for concurrency and ease of use from scratch in go lang
- Led project, organizing team meetings, and distributed tasks for contributors to work on

EXTRACURRICULAR

Columbia Space Initiative

New York, NY

Member

September 2022 – Present

- Developed autonomous sampling vehicle to monitor and mitigate algae blooms in bodies of water
- Implemented animal detection using computer vision models like YOLO for collision avoidance
- Created storage/analytical service for sensor data using databases and authorization

Columbia Robotics

New York, NY

Member

September 2022 – Present

- Designed autonomous robot to navigate maze using NEAT-AI learning algorithm
- Utilized machine learning algorithms for pathfinding in real time, such as Deep Q-learning
- Developed obstacle avoidance algorithm using onboard sensors from the robot

SKILLS

Programming Languages: C/C++, Python, Golang, Javascript, C#, Java, SQL, Haskell, Ocaml

Software Tools: Git, Docker, Database engines (ie. MYSQL, Postgres), Neo4j, FastAPI

Interests: Cooking, Running, Reading, Gaming