

Kevin Durand

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70 Morningside Drive, New York City, NY, 10027

EDUCATION

Columbia University, The Fu Foundation School of Engineering and Applied Science

New York, NY

Bachelor of Science - Major: Computer Science, GPA: 3.7

Sept 2022-May 2026

WORK EXPERIENCE

Student Researcher

New York, NY

History Lab

September 2024 - Present

- 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 user interface for access to AI model pipeline.

Freelancer

New York, NY

Data Annotation Tech

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 to a valid answer
- Reported biases and marked hallucinations from LLM models

RELEVANT PROJECT EXPERIENCE

Project Lead

New York, NY

RootDB

April 2024 - Present

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

Creator

New York, NY

RootDB

September 2023 - Present

- Developed desktop application that allows multiple tools (eg. notes, dictionary,...) all in one place
- Implemented a modular design for ease of use in swapping new functionality
- Built with go and javascript allowing for functionality to access system and network through go

EXTRACURRICULAR

Member

New York, NY

Columbia Space Initiative

September 2022 – Present

- Developed autonomous, unmanned 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 service using database and proper authorization for data collected from sensors

Member

New York, NY

Columbia Robotics

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

Competitor

Boston, MA

Lemelson MIT

September 2021 – February 2022

- Developed Multi-Unit sensor for Climar and Ecological monitoring easily accessible to the public
- Created scalable backend and user-friendly frontend for users to collect and view sensor data

SKILLS

Programming Languages: Python, Go, C/C++, Javascript, Haskell, C#, SQL

Software Tools: Git, Docker, Database engines (ie. MySQL, Postgres), Neo4j, Django

Language: fluent English, fluent Spanish