

# David Vasquez

New York, NY | 646-730-5862 | [dmv6221@gmail.com](mailto:dmv6221@gmail.com) | [linkedin.com/in/david-vasquez1](https://linkedin.com/in/david-vasquez1) | [github.com/vasquezd21](https://github.com/vasquezd21)

## EDUCATION

### Rensselaer Polytechnic Institute

Troy, NY

*Bachelor of Science in Computer Science – Concentration in AI & Data*

*May 2025*

**Relevant Coursework:** Data Structures, Algorithms, Principles of Software, Operating Systems, Machine Learning  
From Data, Software Design and Documentation, Data Mining, Database Systems, Computational Vision

## EXPERIENCE

### Microsoft

June 2025

*Program Manager (Contract)*

*Remote*

- Initiated development of sample code and best practices (Python) for customer engagement and future contributions to the Apache Airflow and dbt open-source community.
- Gained in-depth understanding of Apache Airflow's role within Microsoft Fabric as a key data orchestration solution, aligning with responsibilities for customer engagement and open-source contributions.

### Microsoft

Summer 2023

*Technical Program Manager Intern on AI Platform Team*

*Redmond, WA*

- Developed and documented a comprehensive blog post guide for Olive, a tool that helps developers streamline AI model optimization and deployment
- Conducted market research, identifying and addressing user pain points, leading to enhanced product features.
- Streamlined collaboration with engineering teams to implement new features and iterate on processes.

### Microsoft

Summer 2022

*Software Engineering Intern on AI Platform Team*

*Bellevue, WA*

- Collaborated with 2 interns to develop and document a cross-platform mobile and web application, utilizing ONNX Runtime API for Object Detection and Superresolution models, which was added to official documentation to accelerate developer adoption and showcase ONNX Runtime capabilities
- Leveraged Expo with ONNX Runtime to extend the capabilities of the ONNX Runtime framework for cross-platform mobile applications.
- Selected to present project on the Microsoft Developer's YouTube channel to an audience of 1000 viewers

## PROJECTS

### AI Agent | *Python, LangChain, OpenAI API, Git, Jupyter, Google Colab*

Spring 2025

- Fine-tuned a financial AI agent using FinGPT's open-source framework, leveraging LoRA (Low-Rank Adaptation) to optimize model efficiency on a curated dataset of 10-K filings, earnings call transcripts, and SEC filings.
- Engineered data pipelines to ingest and preprocess 10,000+ unstructured financial documents (PDFs, HTML, text) using PyPDF2, BeautifulSoup, and custom Python scripts, achieving 95% data consistency for model training.
- Implemented retrieval-augmented generation (RAG) with LangChain to ground responses in real-time financial data, improving answer accuracy by 20% on benchmark financial QA tasks.
- Adapted FinGPT's methodology for multi-task learning, training the agent to analyze sentiment, extract key metrics, and generate investment theses, achieving 85% accuracy in backtested portfolio recommendations.

### Banking Systems Service | *Go, SQL, Git, Figma*

Fall 2024

- Designed the end-to-end development process for a scalable website solution to enhance operational efficiency and customer engagement for small banks, addressing key business challenges in account management and security.
- Created comprehensive wireframes and planned key features, encompassing the full system lifecycle from front-end user interfaces (account management, transaction history, customizable templates) to back-end security (2FA security), utilizing Figma, Miro, and Lucidchart.
- Defined project scope, timelines, and user stories using Agile and Scrum methodologies.

## TECHNICAL SKILLS

**Languages:** Python, Java, C/C++, Go, JavaScript/TypeScript, SQL, HTML/CSS

**AI/Data Engineering:** PyTorch, TensorFlow, pandas, NumPy, Snowflake

**Data Visualization:** Power BI, Tableau, Matplotlib

**Web & Cloud:** React, Firebase, Azure, Docker

**Development:** Git, Linux/Bash, Agile/Scrum (Jira), Test-Driven Development