Brendan J. Bennett

🏠 brendanbennett.me | ✉ brendanjosephbennett@gmail.com | 🔗 brendanjbennett | ⧉ brendan-bennett

EDUCATION

University of Virginia — Charlottesville, VA
Bachelor of Arts in Computer Science & Applied Statistics — *Aug. 2019 – May 2023*
Courses: Algorithms, Machine Learning, Computer Architecture, Database Systems, Elementary Linear Algebra, Applied Time Series, Applied Linear Models, Applied Analytics for Business

EXPERIENCE

Moody's Corporation — New York, NY
Software Engineer: Copilot Team — *Aug. 2024 – Present*
- Developed a **full-stack** chat experience for Moody's employees to interact with internal data, analytics, and research via natural language.
- Implemented dynamic chat UI with **Angular** using **TypeScript** to manage conversation history, agent state, human in the loop interactions, and streamed responses.
- Developed a **LangGraph** back end with conversation and tool-calling capabilities. Additionally, implemented state persistence via database writes, human interrupt/resume, and **FastAPI** integration.
- Evaluated and improved LLM performance using **DeepEval's G-Eval**.

Software Engineer: Commercial Real Estate Team — *Feb. 2024 – Aug. 2024*
- Developed a **full-stack** data visualization platform, enabling Moody's clients to access market analytics and property information on more than 7 million properties.
- Enhanced an existing **Storybook React** component library by developing new components built on **AG Grid**.
- Used **dbt with PostgreSQL** to improve both existing data pipelines and overall data quality.

Software Engineer: Structured Finance Team — *Aug. 2023 – Feb. 2024*
- Developed internal **Windows Forms C#** applications which facilitated CMBS and RMBS analysis.

PROJECTS

Financial Dashboard App | *React, Tailwind CSS, Shadcn UI, Apify, Charles Schwab API, Polygon API*
- Developed a responsive financial dashboard leveraging **Shadcn UI** with **React** and **Tailwind CSS**.
- Integrated real estate, brokerage account, and market APIs.
- Experimented with portfolio management, including dynamic re-balancing, quantitative modeling, and risk analytics to optimize asset allocation.
- Utilized ML techniques to forecast returns, identify market trends, and suggest portfolio adjustments.

Digit Detection | *TensorFlow.js, Python, JavaScript*
- Built a CNN model trained on the MNIST dataset to accurately recognize handwritten digits.
- Developed a fully client-side web application using **TensorFlow.js** for real-time, in-browser predictions.
- Implemented a drawing interface with live confidence scores.

Nextfolio Portfolio Template | *Next.js, Vercel, Tailwind CSS*
- Customized and extended a Vercel starter template to create a personalized portfolio.
- Deployed with **Vercel**.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL (PostgreSQL), HTML/CSS
Frameworks and Libraries: React, Angular, Node.js, dbt, Next.js, TailwindCSS, LangChain, LangGraph
Cloud and DevOps: AWS, Azure, GitHub Workflows, Docker, Vercel, Heroku
Tools: Postman, Git, Various IDEs

CERTIFICATIONS

Microsoft Azure Fundamentals: Nov. 2024
AWS Certified Cloud Practitioner: Dec. 2023