Kyle Rood

AI Software Developer — Remote / Boston
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Work Experience and Skills

Contract AI Developer, *Nodus* **Mar. 2025- May 2025**

Skills: Python / Docker / Next.JS / Anthropic Claude

Implemented Python (pydantic-AI) based MCP server to source information from the internet based on a query. Integrated with the current AI module in Docker based Next.JS deployment. Advised team on current state of AI Agents and where they should take their AI implementations next.

Contract Full Stack AI Developer, *Hilltop-App* **Feb. 2025- Mar. 2025**

Skills: Python / Next.JS / Angular / GCP / OpenAI LLM

Improved prompting and reworked UI for NextJs/Angular application. Prompt engineering to make advanced connections between Legislative data, generate messages with context to send directly to congressmen, and automate testing and evaluation of these integrations in Python.

Contract Full Stack Developer, *Strategic Solutions Research* **Dec. 2024- Now**

Skills: Python / React / Wordpress

Creating advanced data visualizations using React and Python to ingest data and generate reports for clients. Updating wordpress site with new copy and features.

Lead Developer, *Resultid* **Sep. 2021- June 2024**

Skills: Python / React / AWS / OpenAI LLM & Local NLP models

Created an advanced data science application in a greenfield setting, set up to run at scale. Led team of engineers while establishing and evolving agile development practices in a growing startup environment. Integrated local Natural Language Processing algorithms and hosted Large Language Models to answer questions from users about any kind of text data. Worked closely with customer feedback to improve features and design.

Lead Machine Learning Researcher, *The George Washington University* **Dec. 2017 - May 2021**

Skills: Python, AWS, Computer Vision, Big Data + Databases

Performed water depth estimation of flooded cities using overhead multiband satellite imagery. Helped DZYNE Technologies with an ongoing DARPA project aiming to to assist in response to natural disasters by routing first responders to accessible roads/routes.

Developed FE and BE of Archive of Many Outdoor Scenes (AMOS), a website to collect, categorize, and display images from free webcams posted around the world. Eventually collected a database of over 3,000 cameras and over 1 billion images from these cameras.

Software Engineering Intern, *Navteca* **May 2020 - Sep. 2020**
Skills: Angular, AWS (Lambda, EC2), Unity
Built Unity based extraction of geographical metadata from Geotiff files. This was used to determine precise spatial information for Virtual Reality visualizations of floods and other natural disasters. Built out AWS Lambda internal scheduling system.

Software Engineering Intern, *LinkedSenior* **Feb. 2020 - May 2020**
Skills: React, Java Spring
Full Stack development of a resident engagement platform for nursing homes. Fixing and building memory games and social activities for residents with dementia.

Software Engineering Intern, *Dzyne Technologies* **May 2019 - Sep. 2019**
Skills: Python, Docker, AWS (Lambda, EC2), Computer Vision
Assembled cloud based testing and integration for Machine Learning and Computer Vision models in a greenfield environment. Used as part of an ongoing DARPA project involving disaster relief assessment.

Python Teaching Assistant, *The George Washington University* **Sep. 2018 - May 2021**
Skills: Python, Big Data + Databases, Communication
Preparing and teaching Python to non CS major students with a focus on data analytics. Holding office hours to help struggling students.

Education

The George Washington University
Masters in Computer Science w/ Concentration in Artificial Intelligence, **GPA:** 4.0 **May 2021**
Bachelors of Science in Computer Science, Minor in Sustainability, **GPA:** 3.7 **May 2020**

Other Interests

Creative: Film Photography, Creative writing (novel and script), Designing + implementing recipes (cooking), Making + selling clothes