Joel C Reiter

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PROFESSIONAL OBJECTIVE

Passionate problem solver and strong communicator with almost 2 years of experience developing and maintaining a large-scale scientific web application designed to search and manage millions of environmental health research references. I am eager to leverage my expertise in full-stack development to advance my career by focusing on Python driven projects.

WORK EXPERIENCE

US Environmental Protection Agency - Full-Stack Web Application Developer Dec 2023 – May 2025

Developed a Django based web application to modernize the Health and Environmental Research Online (HERO) system, enabling scientists to efficiently retrieve and store over six million scientific references.

- Implemented back-end logic using Python, managed database interactions with PostgreSQL, and created responsive front-end features using HTML, CSS and Javascript.
- Led the migration from Django Dramatiq to Django Celery for improved task processing and monitoring, improving task efficiency by over 100%
- Developed internal APIs to connect the front end with the database, and integrated external APIs including Web of Science and PubMed to enrich data access and functionality.
- Developed and maintained CI/CD pipelines using GitHub Actions, enabling quick, secure deployments and ensuring consistent code quality through automated testing, static analysis, and environment-specific workflows.
- Participated in Agile development cycles, including sprint planning, stand-ups, and retrospectives to improve project efficiency and collaboration.
- Developed a Streamlit application to assist scientists with Python-based data analysis, enhancing efficiency and usability

Skills

- Python, Java, C, C++, HTML, CSS, JavaScript
- Django, Flask, Streamlit, React, Node, PostgreSQL, SQL
- AWS, GCP, Docker, Git, Agile Development, CI/CD Pipelines, API Development/Integration
- Complex Problem Solving, Technical Writing, Assembling computers, Software QA
- Machine Learning, RAG, Data structures and algorithms, debugging, and data analysis

Education

Appalachian State University - Graduated 2023

- Bachelor of Science in Computer Science: 3.4 GPA

Projects

RAG Chatbot(Python, Flask, SQLite)

- Designed and implemented an interactive chatbot that leverages Retrieval-Augmented Generation to answer natural language questions over a large structured dataset.
- Integrated OpenAI's chat API with GPT-4 for dynamic SQL query generation and a custom backend to retrieve, filter, and summarize relevant data in real time.

Access Sentinel(Python, Django, PostgreSQL)

- Simulated an insider threat detection web application, simulating sensitive file access, behavioral anomalies, and real-time monitoring via an interactive admin dashboard.
- Implemented user authentication, file access tracking, and anomaly detection algorithms (GeoIP mismatch, access spikes, after-hours activity).

RTDrones(React, Next.js)

- Built a mock website for a hypothetical drone business.
- Deployed with Vercel
- Backend uses Supabase and Google Cloud Storage.