Preston Jones

Dallas, TX | preston@pdjones.pro | LinkedIn | GitHub | Portfolio

SUMMARY

Software engineer focused on building production-grade Al agents, developer productivity tools, and scalable backend infrastructure. Experienced in Python, Go, and Java. I deliver end-to-end systems from infrastructure to API that automate workflows and accelerate engineering teams.

PROFESSIONAL EXPERIENCE

PCI Energy Solutions

Aug 2024 - Jul 2025

Backend Software Developer

- Built infrastructure that processed over 5 million daily transactions for California's \$50 billion energy market by implementing more than 30 CAISO data feeds, enabling real-time trading that affected electricity costs for 30 million residents
- Engineered zero-downtime data synchronization that achieved 99.99% uptime for the energy trading platform, matching CAISO's publication frequency to capture price arbitrage opportunities worth millions daily
- Accelerated settlement processing 95% (hours to minutes) saving millions in operational costs by optimizing database architecture for California's entire power grid data, directly impacting energy pricing for businesses and households across the state

Vast Vertex Media (Al SaaS)

Apr 2024 - Aug 2024

New York, NY

Software Engineer

- Built an AI system that converts research papers into interactive podcasts by implementing LLM parsing, Eleven Labs TTS, and LangChain prompting, enhancing accessibility to complex academic content
- Developed a full-stack 'Talk to Papers' platform by architecting FastAPI endpoints, Spring Boot backend services, and a Node is frontend, improving user engagement by enabling interactive research paper discussions
- Led cross-functional team of 5 (professor + 4 MS students) by coordinating development efforts and pitching product to major publishers including Wiley, Springer Nature, and university stakeholders

University of Oklahoma - Gallogly College of Engineering

May 2022 - May 2024

Norman, OK

- UG Data Scientist Built self-organizing biomedical data lake processing 1TB+ of drug and protein data by implementing S3 storage with entity extraction pipelines that structured data from DrugBank, FDA, ChEMBL into searchable noSQL databases
- Processed 1M+ PubMed Central research papers using NLP pipelines for cancer research, enabling visual discovery of hidden drug-protein interactions and molecular patterns through interactive dashboards
- Achieved successful exit through acquisition by Xyant Services after pitching platform to Johnson & Johnson and NIH stakeholders, while contributing to NSF grant proposals

PROJECTS

Sooner AI | Website

Jan 2025 - Present

 Co-founded non-profit Al education platform for Oklahoma K-12 students by architecting system design to self-host open-source LLMs (LLaMA 4, Mistral, Falcon) on OU's Schooner supercomputer with privacy-first approach

Al Politician | Research

Jan 2025 - May 2025

 Developed fine-tuned political discourse models using LoRA/Mistral-7B and RAG system with LangChain and ChromaDB for thesis project simulating political communication styles on self-hosted GPU infrastructure

EDUCATION

University of Oklahoma

Aug 2021 - May 2025

B.S. Computer Science

Norman, OK

- **GPA**: 3.53/4.00
- Achievements: Cum Laude, Alpha Lambda Delta Honor Society
- Coursework: Data Structures & Algorithms, Artificial Intelligence, Distributed Systems, Machine Learning

TECHNICAL SKILLS

- Languages: Python, Java, JavaScript, TypeScript, Scala, C/C++, R, Go
- ML/AI: PyTorch, TensorFlow, JAX, CUDA, HuggingFace, LangChain, MLflow, Vector Search (Weaviate, Faiss)
- Data Engineering: Apache Spark/PySpark, Trino, Snowflake, Databricks, Neo4j, Airflow, Data Pipelines
- Cloud/DevOps: AWS (EKS, S3, Lambda), Kubernetes, Docker, Terraform, Helm, CI/CD
- Frameworks: FastAPI, Spring Boot, Django, React/Next.js, Node.js, GraphQL