Jasmine Christopher

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Education

Master of Science in Data Science
Indiana University - Bloomington, USA   *August 2024 – Present*

Work Experience

AI/ML Engineer Intern   Remote
riAI Capital Ltd   *June 2025 – December 2025*

- Designed and deployed RAG pipelines on AWS (S3, Lambda) to automate Investment Policy Statement generation, combining LLM reasoning with contextual retrieval via a Pinecone vector store to personalize client plans, reducing advisor preparation time by 80%.
- Built a real-time tax optimization service on Kafka streams with Llama-3 based reasoning, delivering ranked, auditable recommendations, deployed as containerized microservices on AWS ECS/EKS, improving decision speed by 40% for 20+ advisors.
- Engineered an integration layer exposing FastAPI/GraphQL endpoints to connect Wealthbox, RightCapital, Schwab, and Black Diamond, enabling secure data exchange and supporting 50K+ monthly API requests via AWS API Gateway.
- Implemented zero-trust data governance (IAM, AES-256, audit logging) aligned with SOC2 and GDPR compliance requirements.

Software Engineer - Supply Chain   Chennai, India
Mindsprint | Project: MESLite   *January 2023 – July 2024*

- Spearheaded development of MESLite, an in-house .NET Core manufacturing execution system deployed on AWS (EC2, RDS), enabling real-time production monitoring and analytics while eliminating third-party MES licensing costs (aprox.$50K per plant annually).
- Built C# based ETL pipelines with AWS Lambda and S3 staging to transform XML machine and ERP data into normalized SQL Server tables, improving data freshness and reducing manual reconciliation effort by 60%.
- Designed REST/gRPC integrations between SCADA systems and cloud services to enable near real-time production synchronization, reducing data latency from 15–30 minute batch updates to under 10 seconds.
- Developed SQL Server backed SSRS reports for scheduled operational analytics and built Angular dashboards consuming live APIs for real-time KPI monitoring, reducing manual reporting by 40%.
- Implemented RBAC and multi-factor authentication (MFA) for operator and admin access, strengthening application security and compliance with enterprise policies.

Mindsprint | Project: COVL

- Developed and enhanced MES applications using C# and Microsoft SQL Server, building ETL workflows, SSRS reports, and JavaScript dashboards to automate production tracking and eliminate 15+ hours/week of manual reporting, improving plant throughput by 30%.
- Integrated AVEVA/Wonderware MES with SAP (MM/QM/PP/PM) and SCADA machine sensors to enable end-to-end material traceability and near real-time synchronization between shop-floor systems and ERP.
- Deployed to Vietnam as the sole on-site MES engineer, supporting live rollouts and resolving production issues in real time while coordinating with the technical architect and development team to maintain stable operations.

Projects

***E-Commerce Platform** | Node.js (Express), React, Docker, Kubernetes, Terraform, AWS (RDS, DynamoDB, SQS, S3)*

- Built an e-commerce system with independent services for auth, cart, orders, payments, and inventory, exposing REST APIs and using queues for asynchronous processing; deployed containers on Kubernetes on AWS EKS, reducing order failures by 40% through Saga-based transactions and fault-injection testing.

***AI Research Agent** | Python, RAG, LangChain, LangGraph, Pinecone*

- Built a multi-agent RAG research pipeline to ingest and analyze 10k+ research papers and auto-generate structured insights, reducing manual literature review time by 70%.

Technical Skills

Languages: Python, C#, C, TypeScript/JavaScript, SQL, R
Backend & APIs: .NET Core, FastAPI, Node.js, REST, GraphQL, gRPC
Frontend: Angular, React, HTML5, CSS/SCSS
AI/ML Systems: RAG, LangChain/LangGraph/LlamaIndex, Vector Databases (Pinecone, FAISS), LLMs (GPT, Llama, Mistral, BERT, T5), Deep Learning, PyTorch, TensorFlow, JAX, scikit-learn, XGBoost, LightGBM, MATLab
Data Engineering: Apache Spark (PySpark), Apache Kafka, Hadoop (HDFS, MapReduce, ETL/ELT Pipelines, Data Modeling
Cloud & DevOps: Docker, Kubernetes, Terraform, CI/CD (GitHub Actions), AWS (EC2, IAM, API Gateway, SageMaker, Bedrock)
Databases & Analytics: PostgreSQL, MySQL, SQL Server, DynamoDB, Power BI

Certifications

AWS Certified Cloud Practitioner   *AWS Certified Developer Associate*   *Microsoft Certified: Azure AI Engineer Associate*