

# Blossom Williams

## Senior MLOps Engineer

### SUMMARY

Highly skilled MLOps Engineer with extensive experience in building, deploying, and scaling machine learning models in production environments. Proficient with a range of cloud platforms (AWS, Azure, GCP) and containerization tools (Docker, Kubernetes), adept at implementing CI/CD pipelines (Jenkins, GitHub Actions) for reduced deployment time by 40%, and well-versed in MLOps/DevOps integration for efficient ML model lifecycle management. Holds a strong foundation in computer science with an M.Sc. degree and multiple certifications including AWS Machine Learning Specialty. Proven track record with project achievements like developing an ETL pipeline for real-time analytics and achieving a 20% reduction in transaction fraud through a real-time fraud detection system.

### TECHNICAL SKILLS

<b>Main Technical Skills</b>	AWS, CI/CD (3 yr.), Kubernetes, Docker, Python (5 yr.)
<b>Programming Languages</b>	Python (5 yr.)
<b>Java Frameworks</b>	Apache Spark (3 yr.)
<b>Scala Frameworks</b>	Apache Spark (3 yr.)
<b>AI &amp; Machine Learning</b>	Kubeflow (2 yr.)
<b>Data Analysis and Visualization Technologies</b>	Apache Airflow, Apache Spark (3 yr.), DVC
<b>Databases &amp; Management Systems / ORM</b>	Apache Spark (3 yr.), AWS DynamoDB, ELK stack (Elasticsearch, Logstash, Kibana), MongoDB
<b>Cloud Platforms, Services &amp; Computing</b>	AWS, Azure ML
<b>Amazon Web Services</b>	AWS Cloudformation, AWS CloudWatch, AWS DynamoDB, AWS LightSail
<b>Azure Cloud Services</b>	Azure ML
<b>Deployment, CI/CD &amp; Administration</b>	Ansible, CI/CD (3 yr.), GitLab CI, Helm, Jenkins (3 yr.)
<b>Virtualization, Containers and Orchestration</b>	Docker, Kubernetes
<b>Version Control</b>	Github Actions (2 yr.)
<b>Message/Queue/Task Brokers</b>	Kafka (3 yr.)

<b>Platforms</b>	Microsoft Power Platform
<b>Logging and Monitoring</b>	Prometheus

## WORK EXPERIENCE

### MLOps Engineer, End-to-End ML Pipeline with Kubeflow

**Duration:** Unknown specific duration within December 2020 – Present

**Summary:** Designed and implemented an end-to-end machine learning pipeline with Kubeflow on Kubernetes, focusing on reproducibility and scalability for high-volume daily predictions.

**Responsibilities:** Automated data ingestion, preprocessing, model training, and deployment using Kubeflow and MLflow.

**Technologies:** Kubernetes, Kubeflow, MLflow

### MLOps Engineer, Real-Time Fraud Detection System

**Duration:** Unknown specific duration within December 2020 – Present

**Summary:** Implemented a real-time fraud detection system using a PyTorch-based model which integrated with Kafka and Spark, achieving a 20% reduction in transaction fraud.

**Responsibilities:** Deployed the PyTorch fraud detection model and integrated with Kafka and Spark for real-time inference on AWS.

**Technologies:** PyTorch, Kafka, Spark, AWS

### DevOps/Cloud Engineer, Cloud Infrastructure and ML Orchestration

**Duration:** June 2017 – December 2020

**Summary:** Containerized ML applications and orchestrated with Kubernetes for enhanced scalability and fault tolerance for big data and ML workloads.

**Responsibilities:** Built and maintained cloud infrastructure, developed ETL pipelines, implemented monitoring and alerting systems.

**Technologies:** AWS, Azure, Docker, Kubernetes

## EDUCATION

- **M.Sc. in Computer Science**  
• Memorial University of Newfoundland
- **M.Sc. in Computer Science**  
• University of Debrecen
- **B.S. in Computer Science**  
• Redeemer's University

## CERTIFICATION

- **AWS Certified Machine Learning – Specialty**



- **TensorFlow Developer Certificate**
- **Microsoft Certified: Azure Data Scientist Associate**

