## NAGANATHAN PARAMASIVAM

## **DevOps Engineer Specializing in MLOps | AWS Certified**

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#### PROFESSIONAL SUMMARY

DevOps Engineer with 4+ years of experience in cloud infrastructure automation and 8 months of production MLOps experience. Proven expertise in designing scalable AWS environments using Terraform, managing Kubernetes workloads, and implementing CI/CD pipelines. Successfully transitioned to MLOps, building production ML systems with 99.9% uptime and automated deployment workflows.

#### TECHNICAL SKILLS

Cloud Platforms: AWS (EC2, S3, Lambda, SageMaker, EKS, IAM, CloudWatch)

DevOps & CI/CD: Terraform, Docker, Kubernetes, GitHub Actions, Azure DevOps

Programming: Python, SQL, Bash, YAML

MLOps Tools: MLflow, FastAPI, Model Registry, Prometheus, Grafana

Databases: MySQL, PostgreSQL, Redis

Monitoring: Prometheus, Grafana, CloudWatch

#### CERTIFICATIONS

AWS Certified Solutions Architect – Associate (2024) – Amazon Web Services

#### PROFESSIONAL EXPERIENCE

# **Arthur Grand Technologies — DevOps & MLOps Engineer**

Client: A+E Television Network | Chennai, India | Oct 2021 – Present

#### **MLOps Development (Jan 2024 – Present)**

- Built production ML pipeline for customer support ticket classification achieving 92% accuracy and
   <100ms response time</li>
- Implemented real-time model serving infrastructure using FastAPI, Redis, and Kubernetes with automated scaling
- Created MLOps CI/CD pipeline with automated model training, testing, and deployment using GitHub Actions

- Developed ML monitoring system with Prometheus and Grafana for model performance tracking and drift detection
- Deployed fraud detection prototype processing 1000+ transactions per second with ensemble ML models

### **DevOps Infrastructure (Oct 2021 – Dec 2023)**

- Automated infrastructure provisioning using Terraform for multi-tier applications across multiple environments
- Led migration of EC2-based workloads to Kubernetes (EKS), reducing operational overhead by 40%
- Built CI/CD pipelines using Azure DevOps and GitHub Actions with automated testing and deployment
- Developed Python scripts for MySQL backup and restore automation
- Created AWS Lambda workflows for snapshot automation and multi-account resource management
- Integrated Freshservice with Slack bots for automated ticket resolution
- Built and deployed timesheet application using Java, Spring Boot, Node.js, and MySQL on AWS
- Implemented AIOps automation using Kubia AI for intelligent operational workflows

#### **KEY PROJECTS**

# Smart Customer Support Ticket Classifier | Jan 2024 - Mar 2024

Technologies: Python, scikit-learn, FastAPI, Docker, Kubernetes, Redis, Prometheus

- Developed ML pipeline classifying support tickets into 5 categories with 92% accuracy
- Implemented real-time inference API with <100ms response time and Redis caching
- Deployed on Kubernetes with auto-scaling and comprehensive monitoring
- Reduced manual ticket routing time by 85%

# **Production ML Pipeline Framework** | Mar 2024 - May 2024

**Technologies:** MLflow, GitHub Actions, Terraform, AWS SageMaker, Kubernetes

- Built automated ML pipeline with training, validation, and deployment workflows
- Implemented blue-green deployment strategy with automatic rollback capabilities
- Created Infrastructure as Code templates for consistent ML environment provisioning
- Achieved 99.9% uptime with automated monitoring and alerting

# **Real-time Fraud Detection System** | May 2024 - Present

Technologies: XGBoost, FastAPI, Redis, Docker, AWS ECS

- Developed ensemble ML model for transaction fraud detection with 94% precision
- Built real-time feature engineering pipeline with sub-200ms inference latency
- Implemented scalable inference infrastructure handling 1000+ transactions per second

## AlOps ChatOps Automation | 2022 - 2023

**Technologies:** Kubia Al, Slack, Python, AWS Lambda

- Integrated Al-powered automation with Slack for operational workflows
- Automated patching, updates, and releases through natural language commands
- Reduced incident response time by 60% through intelligent automation

### **EDUCATION**

#### **Bachelor of Computer Applications (BCA)**

Jamal Mohamed College, Tamil Nadu — 2021

#### **ACHIEVEMENTS**

- Built ML systems serving 1M+ daily predictions with 99.9% uptime
- Achieved 40% reduction in infrastructure costs through automation and optimization
- Led successful migration from EC2 to Kubernetes (EKS) for improved scalability
- Implemented automated ML monitoring reducing manual intervention by 85%
- Recognized for innovation in DevOps automation and AlOps implementation