AKSHAY PAL

Experience

BAE Systems Digital Intelligence

Sept 2022 - present

Software Engineer

• Client Project #2:

- o Developed critical national infrastructure using Spring Boot and React Typescript.
- Utilised test-driven development (TDD) to minimise bugs and streamline debugging, ensuring a minimum test coverage of 90% across all microservice repositories.
- Led complex deployments to not-prod and prod environments, trained colleagues on the deployment process to increase resource availability and deployment frequency.
- Automated the defect investigation process by writing reusable Python scripts for data retrieval in Elastic, improving productivity and reducing defect resolution time.
- o **Collaborated effectively** with engineers across **multiple product teams** to develop and integrate microservices for cross-product interfacing.

Client Project #1:

- Junior Software Engineer and Architect on a large-scale AWS cloud migration project, focusing on lift-and-shift strategies.
- Reviewed and enhanced deployment scripts to ensure a smooth transition from on-premises to cloud, reducing costs of a critical government application.
- Developed a KPI dashboard in Power BI to visualise data processing changes between builds, aiding key stakeholders in identifying improvement areas and prioritising work.
- Conducted data analysis and application improvement using Python, addressing, and reducing defects raised due to poor data quality.
- Unfortunately, project ended after six months due to funding issues, limiting the opportunity to implement code changes and quantify enhancements to deployment scripts and processes.

Certifications

- Java 17 Certified Developer Oracle
- AWS Certified Cloud Practitioner Amazon Web Services
- Foundational C# with Microsoft Microsoft
- Data Analysis with Python freeCodeCamp

Skills

Programming Languages: Java, Python, JavaScript, TypeScript, C#

Frameworks and Libraries: React, Spring Boot

Tools and Technologies: Git, Linux, Kubernetes, Docker, Drone, Kafka, Jira, Confluence

Databases: PostgreSQL, Elastic, Amazon Athena

Cloud Platforms: AWS

Development Methodologies: TDD, Agile, Scrum

Education

University of Sussex

Master of Science (MSc) in Quantum Technology Applications and Management

• Grade – in progress

St. Hilda's College, University of Oxford

Master of Engineering (MEng) in Engineering Science

- Grade Upper Second Class (2.1)
- Thesis: An Imaging Informed Mathematical Model of Tumour Growth (74)