PADMESH NAIK

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SUMMARY

Software Engineer with 3+ years of experience in building scalable solutions across e-commerce, IoT, and fintech domains. Proven track record of optimizing system performance, implementing cloud-native architectures, and delivering data-driven solutions. Passionate about creating robust applications that drive business value. Strong foundation in agile methodologies and modern software development practices.

SKILLS

Programming Languages: Python, Java, Javascript, TypeScript, SQL
Web Development: HTML5, CSS3 , XML, React, Angular, Bootstrap, Node.js, Express.js, Spring Boot, Flask, Django, RESTful APIs
Database Technologies: MySQL, PostgreSQL, MongoDB, Cassandra
Big Data & Analytics: Apache Spark, Hadoop, Apache Kafka, MapReduce, HDFS (Hadoop Distributed File System)
Cloud Platforms: AWS (EC2, S3, Lambda, Redshift, Elastic Load Balancing), Microsoft Azure (Virtual Machines, Databricks)
Frameworks: NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch
Version Control and Testing: Git, GitHub, Junit, Unit Testing
DevOps & Containerization: Docker, Kubernetes, Jenkins, Apache Airflow, MLOps
Certifications : AWS Certified Cloud Practioner, AWS Generative AI with LLMs, Azure Fundamentals, Azure Data Scientist

EDUCATION

Master of Science in Computer Science | Worcester Polytechnic Institute (WPI), MA | **GPA : 3.8/4.0** **May 2024**

Bachelors in Computer Engineering | University of Mumbai, India | **CGPI : 8.16/10** **October 2020**

PROFESSIONAL EXPERIENCE

Software Engineer | CTP, New York **August 2024 - Current**

- Created a scalable e-commerce platform using **Shopify themes, Liquid templating, and JavaScript**, integrating custom plugins (**SEO Booster)** to enable dynamic product filtering, personalized recommendations, and automated order tracking functionality.
- Developed and deployed backend infrastructure using **AWS EC2, RDS, API Gateway, VPC**, and **Secrets Manager**, implementing secure networking and automated database operations to support global accessibility and concurrent user requests.
- Developed **REST APIs** and optimized **MySQL** database schemas with efficient indexing strategies, utilizing **AWS** infrastructure to enhance query performance and enable seamless integration between Shopify frontend and backend services.

Graduate Assistant | Worcester Polytechnic Institute, Worcester **January 2023 - August 2024**

- Built backend systems for Fintech research projects with Python, SQL, and AWS services (**Redshift and S3**), resulting in a 20% reduction in storage costs and enabling efficient management of over 100,000 transaction records.
- Developed a scalable analytics system with **Hadoop** and **MapReduce**, enabling real-time insights from financial datasets.

Software Developer Intern | Clearly Energy, Maryland **January 2024 – April 2024**

- Developed a web application using **Angular.js** and **Django**, implementing interactive maps and energy policy compliance tracking features for building management across multiple jurisdictions.
- Implemented **Docker** containerization and **Jenkins CI/CD** pipelines for automated deployment and testing, reducing deployment failures by 18% and enhancing application reliability.
- Developed comprehensive geospatial features using OpenLayers, including address search functionality, dynamic filter menus, and data points clustering for efficient visualization.
- Optimized database performance through schema normalization and **SQL** indexing strategies, resulting in 22% improvement in data retrieval efficiency for large-scale property datasets.

Software Engineer Intern | Building Assure PBC, Massachusetts **May 2023 – August 2023**

- Implemented a real-time IoT monitoring system using **React** and **Node.js,** integrating GoRules Engine for decision-making, resulting in streamlined alert generation and enhanced system responsiveness for environmental metrics including CO2, temperature, and humidity.
- Engineered scalable data pipelines using **AWS Lambda, Python**, and **Apache Kafka** for real-time data streaming and processing, integrated with **MongoDB** for efficient data persistence, leading to a 25% improvement in data processing speed and enhanced system scalability.
- Established robust testing infrastructure using **Jest** and **Mocha**, creating unit and acceptance tests for API endpoints and product features, ensuring system reliability and maintaining code quality through automated test coverage.

System Software Engineer | Tata Consultancy Services, India **September 2020 - August 2022**

- Architected and implemented end-to-end CI/CD pipelines for microservices-based absenteeism analysis system using **Jenkins**, **Docker**, and **Kubernetes**, reducing deployment time by 30% and improving release reliability through automated testing and containerization.
- Developed and optimized **ETL** data pipelines for processing employee absentesim records using **Python, Apache Spark**, and **Snowflake**, reducing processing time from **9 hours to 3.5 hours** by implementing parallel processing, enabling timely workforce planning and reporting.
- Engineered machine learning models (XGBoost and LightGBM) for estimating time of arrival (ETA) in the automotive parts supply chain, integrating **AWS S3**, **Snowflake** and **Tensorflow** to enhance delivery accuracy and optimize inventory management.
- Led data analysis initiatives using **Python** and **SQL** to analyze 30 years of customer purchase patterns, implementing **Random Forest** models for churn prediction and price optimization, improving customer retention through targeted strategies.