AKSHAY PANDEY
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PROFESSIONAL WORK EXPERIENCE

Teksolve IT Solutions | Senior Full Stack Engineer, Remote, NJ *Feb 2023 – Present*

- Designed a Microservices-based application using Django, FastAPI for backend services, MongoDB for NoSQL data storage, and Docker for containerization, enhancing scalability and resource utilization by 40%.
- Enhanced MapReduce job performance by fine-tuning the algorithm, reducing processing time by 30%.
- Integrated state management libraries (Redux and Vuex), enhancing application maintainability and scalability.
- Deployed machine learning models through Django-powered dashboards, facilitating direct user interaction through an intuitive web interface and accelerating model deployment time by 30%.
- Developed Spark applications for real-time and batch data processing, integrating with Hadoop and Kafka for a robust data pipeline.
- Orchestrated ML workflows using AWS Step Functions, automating end-to-end pipelines for large-scale data processing, feature engineering, model training, evaluation, and inference, and monitoring pipeline execution for resource constraints achieving 30% reduction in execution time and 50% decrease in errors.
- Engineered and executed robust A/B testing frameworks, rigorously assessing model performance; facilitated smooth model version transitions, enhancing accuracy by 20% and cutting transition errors by 30%.

University at Buffalo | Graduate Assistant, Buffalo, NY *Jan 2022 – May 2022*

- As a Quantitative Analyst, mentored 100 students in quantitative analysis for research projects, resulting in a 30% improvement in research quality and outcomes.
- Leveraged R, Python, SPSS, and SAS to modify statistical models and optimize regression and classification models, resulting in a 10% improvement in model performance.
- Performed hypothesis testing, including chi-square and t-tests, to validate research findings and ensure the robustness of statistical models used in predictive analytics.

NSEIT Limited | Associate Systems Analyst, Mumbai, India *Jul 2019 – Jul 2021*

- Architected scalable REST APIs using Java and Spring Boot, facilitating seamless data exchange and achieving a 30% improvement in system performance.
- Enhanced backend data processing by implementing efficient Spring Data JPA repositories, resulting in a 30% improvement in database query performance.
- Optimized database performance by fine-tuning SQL queries, reducing query execution time by 40%.
- Connected Spring Boot applications with Kubernetes for efficient management and scaling of microservices.
- Incorporated third-party services through REST APIs using Spring Boot, extending application functionality and improving data integration efficiency by 35%.
- Implemented Git workflows to manage version control, code reviews, and collaborative development among team members.
- Engineered containerized solutions for machine learning models using Docker, ensuring seamless integration within the stock exchange back-office environment and reducing downtime by 50%, while enabling effortless scalability.

EDUCATION

Master of Science in Engineering Science (Data Science) | University at Buffalo, SUNY, NY *Aug 2021 – Feb 2023*
Achievements**:** Graduate Assistant Scholarship Award, Jan 2022
Bachelor of Engineering in Computer Engineering | University of Mumbai, India *Jul 2015 – May 2019*

TECHNICAL SKILLS

Programming Languages:	Python, Java, R, JavaScript, SQL, C, C#, C++, Scala, Go
Databases:	PL/SQL, MySQL, MongoDB, Couchbase, RDS, Elasticsearch, PostgreSQL, DynamoDB
Technologies/Frameworks / Libraries/Tools	Machine Learning, Unix, Linux, Tableau, Ansible, Power BI, React, Vue.js, Apache Spark, HBase, Cassandra, Hibernate, Spring Boot, Junit, ETL, SDLC, Apache Spark, Flink, PySpark, Micro services, Terraform, Flask, Django, Jenkins, GitHub, Git, Airflow, Docker, Kubernetes, JavaScript, Scikit-learn, MLFlow, Keras, TensorFlow, AI, PyTorch, GCP, AWS S3, IAM, EC2, Lambda, SageMaker, SQS, Azure, Hadoop, MapReduce, Kafka, Postgres, NoSQL, SparkSQL

PROJECT EXPERIENCE

Soccer League Application | (HTML, CSS, JavaScript, PostgreSQL, React, Node.js, Python, Git)

- Developed a full-stack web application utilizing HTML, CSS, JavaScript, React, Node.js, Python, and Git, to administer a PostgreSQL relational database serving as a platform to judge a soccer player's performance in recent years and visualized player statistics in interactive plots and ratings.