VENKATA KRISHNA POKALA

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EDUCATION

MASTER OF SCIENCE Computer Science, University of South Florida | Tampa, FL

GPA-3.85

• BACHELOR OF TECHNOLOGY Computer Science, Vignan University | India

GPA-9.4

• **RELATED COURSEWORK:** Advanced Data Structures and Algorithms, Object Oriented Programming, Advanced Computer Architecture, Computer Networking, Data Mining, Software Verification Validation and Testing, Database Management System, Operating Systems, Mobile Systems, Data Science for Software Engineers, Machine Learning.

WORK EXPERIENCE

Software Engineer (DSE), Infosys, Hyderabad, India

Jun' 2022 – Jul' 2023

- Designed and implemented microservices on AWS architecture; integrated SOAP web services facilitating seamless data exchange
 while enhancing system reliability leading to a decrease in latency of service requests by over two seconds.
- Architected microservices solutions on AWS, integrating SOAP web services for seamless data exchange and utilizing Splunk for realtime monitoring, resulting in a 40% improvement in scalability and performance.
- Enhanced code quality by incorporating Swagger for API documentation and adhering to SDLC principles.

Data Engineer, OpenText, Hyderabad, India

Apr' 2020 – May' 2022

- Developed a MERN stack-based application for automating health records management, significantly enhancing data accessibility and operational efficiency through real-time data synchronization.
- Developed and optimized ETL processes using Python, Spark, SQL, SSIS, and SSMS, enhancing data processing and analytics efficiency by 25%
- Implemented caching mechanisms for data retrieval in RESTful APIs, enhancing integration with hospital applications and achieving a 15% improvement in response times for healthcare data access.
- Achieved a 99.99% system uptime by expertly managing a CI/CD pipeline with Jenkins and Docker and optimized for high availability and
 fault tolerance through Kubernetes orchestration and Enhanced code quality by incorporating Swagger for API documentation and
 adhering to SDLC principles & Integrated automated testing with Jest and Selenium to minimize production bugs and achieved 84% code
 coverage.
- Designed and implemented microservices on AWS architecture; integrated SOAP web services facilitating seamless data exchange while enhancing system reliability leading to a decrease in latency of service requests by over two seconds.

Data Engineer, Verzeo, India

Jan' 2019 – Jun' 2019

- Performed data preprocessing and analysis using Python, enhancing dataset accuracy by 25% through advanced cleaning methods.
- Built machine learning models to predict customer churn, achieving a 15% improvement in prediction accuracy.
- Created interactive Tableau dashboards that streamlined stakeholder reporting, cutting reporting time by 30%.
- Applied statistical techniques and machine learning to increase business outcomes by 15%.

TECHNICAL SKILLS

- Programming Languages: Java, Python, C, C++, Scala, R.
- Web Development & Frameworks and Libraries: HTML, CSS, JavaScript, TypeScript, RESTful APIs, Servlets, Spring, Nodejs, ReactJs.
- Database Technologies: SQL, MySQL, PostgreSQL, T-SQL, Data Pipelines (ETL), No SQL (MongoDB, Cassandra).
- Data Analysis and Engineering: Data Cleaning, Statistical Analysis, Data Visualization (Tableau, Power BI), pandas, NumPy.
- Data Tools and Technologies: Docker, Kafka, Kubernetes, Apache Airflow, Hadoop, GitHub, Jenkins, GCP, AWS, Redshift, Jupyter Notebook, Spark, Excel, Agile, NLP, Power BI, Git, Business Intelligence, NextJs, Tableau, UiPath (Robotic Process Automation)
- Machine Learning: Regression, Classification, Clustering, Model Evaluation, Data Processing.
- Software Development: Object-Oriented Programming (OOP), Software Design, Debugging, Testing (Selenium, Postman).
- Other Skills: Communication, Project Management, Leadership, Multitasking.

ACADEMIC PROJECTS

Handwritten Digit Recognition Using Machine Learning

Aug'2024 – Dec' 2024

- Developed a Handwritten Digit Recognition system using a supervised machine learning model based on the distance-weighted KNN algorithm, achieving an accuracy of 95% on test data.
- Leveraged Python and NumPy to efficiently preprocess and analyze datasets, reducing computation time by 20% compared to standard implementations.
- Optimized the model for performance, enabling accurate recognition of handwritten digits with a prediction speed of

$\textbf{COVID-19-Data-Analysis-and-Visualization} \mid \textbf{Matplotlib}, \textbf{Seaborn}, \textbf{Pandas}$

Aug' 2021 – Jan' 2022

- Analyzed COVID-19 trends across 100+ countries, optimizing data processing by 30%.
- Integrated and correlated multi-source data, merging COVID-19 and World Happiness Report datasets to identify key socio-economic factors impacting infection rates with 85%+ correlation accuracy
- Developed data-driven visualizations, plotting GDP per capita, social support, and health expectancy vs. infection rates, leading to actionable insights for policy recommendations.

RESEACH PAPER

Prediction of Breast Cancer, Comparative Review of Machine Learning Techniques and link:

Jan' 2022-Aug' 2022

https://www.irjet.net/archives/V9/i8/IRJET-V9I882.pdf

CERTIFICATIONS

- Microsoft Azure Data Engineer Associate (<u>DP-203</u>).
- Earned a Python for Everybody certification from Michigan University (Coursera).