Venkata Chirravuri

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EDUCATION

George Mason University, Fairfax, VA

August 2021 - May 2023

Masters of Science in Computer Science: 3.4/4.0

Mahindra University, Hyderabad, India

August 2014 - June 2018

Bachelor of Technology in Computer Science: 7.29/10.0

SKILLS

Programming Languages: Python, JavaScript, SQL, HTML

Databases: MySQL, PostgreSQL, MongoDB, Snowflake, Cassandra

Big data Technologies: Hadoop, HDFS-MapReduce, Hive, Spark, PySpark, Spark Streaming CSS, Apache Kafka, Airflow, Django, Flask, Fast API, Rest API Angular

Frameworks: CSS, Apache Kafka, Airflow, Django, Flask, Fast API, Rest API AngularJS
Cloud Technologies: AWS (IAM, EC2, EMR, S3, RDS, RedShift, SNS, SQS, CloudWatch, Glue, Kinesis, Athena

CloudFormation), GCP Big Query

Visualization & CI/CD: Power BI, Matplotlib, Tableau, Docker, Git, Kubernetes

Other: Agile Methodology, Scrum, Kanban, Cross-functional Collaboration, Sprint Planning

PROFESSIONAL EXPERIENCE

Data Engineer at Tech Mahindra, Bengaluru, India

August 2019 - June 2021

- United Data Migration Framework (UDMF):
 - Developed efficient data migration libraries leveraging Spark, resulting in a successful implementation of UDMF 2.0 for Verizon; migrated high volume data, enhancing data processing speed by 40% and reducing migration time by 50%.
 - Optimized native reusable libraries functionalities by implementing Python, Scala, and SQL techniques, resulting in a 40% reduction in processing time.
 - The framework has improved overall system performance and has demonstrated a 50% reduction in overhead costs.
- Data Migration: Teradata Google Big Query:
 - Brainstormed and proposed a proof-of-concept for Tech Mahindra and other business partners, facilitating seamless data migration from a database management system to a cloud-based data warehouse.
 - Created Python scripts to automate hassle-free data migration from Teradata to Google BigQuery, resulting in a 50% reduction in data transfer time and enabling faster data analysis and reporting.
 - Planned relevant metrics, objectives and constraints for data pre-processing techniques and data pipelines.

Jr. Data Scientist at Tech Mahindra, Bengaluru, India

July 2018 - August 2019

- Artificial Intelligent Legal Assistant (AILA):
 - Collaborated in a team to develop AILA, an application to automate legal contracts management using NLP techniques.
 - Preprocessed and analyzed 7000 contracts to train and test bi-directional LSTM text classifiers.
 - Led a team, including Legal experts, analyzed strategies for rule-based NER approach to extract provisions, metadata, and risks with 94% accuracy.
 - The platform reduces turnaround time from 10 days to 7 hours and increases accuracy by minimizing manual errors.

ACADEMIC PROJECTS

Collaborative Immersive Analytics

Unity, Immersive Analytics Toolkit (IATK), Oculus Integration, C#, VRTK Tilia

- Conducted research and redefined a collaborative 3D Virtual Reality environment for data analysis using IATK. Enabled multi-user interaction with Unity, Unity PUN, and VRTK Tilia packages, deploying the application on Oculus 2 devices.
- Coordinated the implementation of an open-source infrastructure for Multi-user XR research, <u>Collaborative Mobile</u> Immersive Computing, resulting in a 40% increase in research productivity and collaboration efficiency.

Car Price Prediction

PySpark, MLlib, Handy Spark

- Took lead in designing and developing a precise approach for estimating used car prices, leveraging data from Craigslist.
- Employed PySpark & MLlib for efficient data processing, cutting processing time by 60% and boosting predictive accuracy by 45%. Created Power BI dashboards for comprehensive analysis of multiple machine learning models' results.

Student Survey Portal

HTML/CSS, JavaScript, AWS (S3, EC2), Kubernetes, Docker, Jenkins

- Gained expertise in full-stack development, leveraging AWS services (S3, EC2, IAM) for application creation and hosting.
- Employed Docker and Kubernetes for reliable and scalable application containerization and deployment, in Rancher-managed K8 clusters. Enhanced product updates speed and reliability by setting up CI/CD pipelines with Jenkins.