AJAY RANGANATH
SOFTWARE & DATA ENGINEERING

CONTACT

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PROFILE

Seven years of experience at top-tier e-commerce institution focusing on data pipelines, big data analysis, data warehousing and predictive analytics.

EDUCATION

JAN 2019
RUTGERS UNIVERSITY [NJ]
Master of IT and Analytics

JUN 2010
VISVESVARAYA TECH. UNIVERSITY [INDIA]
Bachelor of Electrical Engineering

TECHNICAL SKILLS

- **Python** (NumPy, Pandas, Scikit-Learn, TensorFlow, PyTorch)
- **SQL** (MySQL, Postgres, Oracle, Teradata, **Redshift**)
- **No-SQL** (MongoDB)
- **PySpark, Zeppelin, Jupyter**
- **ETL** (Airflow, DataStage)
- **Data Visualization** (Tableau, Seaborn, Matplotlib, Bokeh)
- **Machine Learning** (Regression, Classification, ANN, PCA, SVM)
- **AWS** (EC2, S3, RDS, Lambda)
- **Unix**, R

MANAGEMENT SKILLS

- Agile & Test-Driven Development
- JIRA, Git, CI/CD, Jenkins

EXPERIENCE

JUL 2019 – PRESENT | NYC
Data Engineer | 2 Degrees Investing Initiative

- Implemented Airflow to replace the legacy ETL process into **simpler DAG workflows** which led to the efficient data flow from SQL and Flat Files sources into postgres db on Azure.
- Developed **python data validation scripts** to compare multiple databases for the data accuracy across the system.
- Created **database triggers** to capture the change in data in tables for future auditing purposes.
- Adopting **agile development** process in implementing the new system which would eventually streamline the ETL process.

SEP 2018 – JUN 2019 | NJ
Research Assistant - Data Science | Rutgers Neuroscience Lab

- Developed neural network and pattern recognition algorithms **establishing behavioral patterns** between neuronal activity and visual cortex.
- Implemented MariaDB database system to record neuronal activity which **eliminated the legacy process** of storing data through Matlab files.

SUMMER 2018 | NYC
Machine Learning Intern | Hindsight Technology Solutions

- Collaborated with lead Data Scientist in developing NLP models to identify entities and we achieved 80% accuracy which **helped the team to improve** the core Smart-Tagging product.
- Designed and developed databases and **ETL solutions on AWS** which led to rich Wikipedia data for smart tagged entities.

SEP 2010 – AUG 2017 | BANGALORE & LONDON
Senior Software Engineer | Tesco PLC

Leadership
- **Led the team of five** developers building data pipelines and perform data analysis that measurably and efficiently improved ETL platform.
- **Interfaced with stakeholders** on business requirements and valuable product feedback post project delivery.

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CERTIFICATIONS

- Python for Data Science and Machine Learning (Udemy)

- Tableau 10 for Data Science (Udemy)

- Hands-On Course to Master Apache Airflow (Udemy – in progress)

- Machine Learning (coursera – in progress)

EXPERIENCE (CONT)

Tesco PLC:

- **Established a mentoring program** to support new employees for six weeks, cutting annual turnover by 40%.

Engineering and Analysis

- Developed ETL models and Python scripts to automate master data flow **from OLTP into OLAP** systems with 100% data flow accuracy.
- Performed large scale data analysis to **aid management with actionable insights** and reports which influenced the direction of the business during peak trading periods.
- Developed complex SQL queries and refactored existing automation scripts **to improve the efficiency** of ETL models which helped double the performance of batch jobs.
- Collaborated with the Data Warehouse team to work on a proof of concept to migrate **Tesco's ETL and BI platform onto Hadoop**.
- Participated in hyper care and sanity checks for monthly **production deployments** of tesco.com.