

THOMAS GEORGE THOMAS

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EDUCATION

Master of Science, Data Analytics Engineering

Northeastern University, Boston, MA

Expected August 2023

GPA: 3.9/4.0

Relevant Coursework: Data Mining, Machine Learning, Data Management for Analytics

Bachelor of Technology, Computer Science and Engineering

Manipal Institute of Technology, Manipal University, Manipal, India

May 2016

SKILLS

Programming Languages: Python, Scala, SQL, Unix shell scripting

Data Engineering: Hadoop, Apache Spark, Hive, Impala, Sqoop, API, Streamlit, Control M, Heroku

Amazon Web Services: S3, Athena, Glue, EMR, EC2, Lambda, Step Functions, Batch, SQS, Redshift, Boto3

Databases & Data Warehouses: Snowflake, MS SQL Server, MySQL, MariaDB, SQLite, MongoDB

Packages: Pandas, NumPy, Scikit-learn, Matplotlib, Requests, BeautifulSoup, Multiprocess, Pytest, SQLAlchemy, Plotly

Data Visualization & Other Tools: Tableau, Flourish, Data Wrapper, DBeaver, Jupyter Notebooks, Anaconda

DevOps & CI/CD: Agile, Git, Bitbucket, GitHub, Bamboo, Maven, Confluence, Jira

Certifications: IBM Certified Data Science Professional

EXPERIENCE

Data Analyst

February 2023 - Present

Northeastern University, Massachusetts, USA

- Built Dashboard for 20 Smart Homes showcasing uptime analysis, energy prediction, and KPIs on Plotly Dash, MySQL and Python

Data Engineering Co-Op

July 2022 - December 2022

Montai Health, Massachusetts, USA

- Developed AWS ETL pipelines using Redshift, SQS, Lambda, EMR, EC2, PySpark, Athena, and Glue to transform 100 TB data
- Established health, drug, and bioinformatic Data Lake from RDBMS (SQL) and NoSQL databases on AWS worth 100 TB
- Created web scrapers to crawl data from CSVs, XMLs, Parquet, APIs, and FTP servers leveraging Python to collect 5 GB data daily
- Implemented CI/CD, test-driven development, and test automation on GitHub actions increasing code quality by 100%

Senior Big Data Engineer

June 2018 - August 2021

Legato Health Technologies (presently Carelon Global Solutions) - Elevance Health, Bangalore, India

- Constructed data pipelines for 5 initiatives, including providing Clinical Investigative Insights in AWS, Hadoop, and Apache Spark
- Migrated 112 TB of data from on-premises Hadoop cluster onto AWS Cloud and Snowflake
- Innovated and automated post-migration validation reports in Spark Scala, leading to \$7000 quarterly savings
- Executed continuous integration and continuous deployment (CI/CD) pipelines for 4 projects deploying DevOps
- Chaired release management and code migration for production/pre-production environments for 5 projects

Software Engineer - Hadoop Developer & Big Data Engineer

June 2016 - May 2018

Middle East Management Consultancy and Marketing, Muscat, Oman

- Shipped and delivered analytics dashboard leading to an increase in pharmaceutical sales by 12% annually
- Developed pipelines to handle data of 1.5 TB/day from ingestion to reporting layer using Shell script, Hadoop & Spark
- Implemented dataset transfer of 26 TB between Hadoop and MySQL RDBMS leveraging Sqoop
- Performed performance tuning in Spark, SQL, and Sqoop, resulting in a 60% response time reduction
- Restructured and redesigned Data Lake to utilize Parquet and Snappy compression to cut 30% storage and compute costs

PROJECTS

YouTube Analytics Dashboard

December 2022 - March 2023

- Created live dashboard on Streamlit operating Python and YouTube API, picturing Sentiments and 5 KPIs for any video

Age of Plastic

March 2022 - April 2022

- Designed data-backed dashboards showcasing adverse effects of plastic and mitigation steps on Tableau

Clustering Paris and London

August 2020 - September 2020

- Analyzed cities of Paris and London to show distinct features and visualized similar neighborhoods using Folium, Python, ArcGIS, Foursquare API, and K Means Clustering Machine Learning model