Mohith Jothi Kannan

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Tempe, AZ

EDUCATION

Arizona State University

Aug 2022 – May 2024

Master of Science in Computer Science; GPA: 3.89/4.0

Tempe, AZ

• Relevant Coursework: Foundations of Algorithms, Software Security, Software Testing, Data Processing at Scale, Data Mining, Spatial Data Science, Natural Language Processing

Vellore Institute of Technology

Jul 2017 - Jun 2021

Bachelor of Technology in Computer Science; GPA: 8.39/10.0

Vellore, India

• Relevant Coursework: Data Structures & Algorithms, Database Management, Operating Systems, Web Programming, Software Engineering, Theory of Compilers, Computer Networks, High Performance Computing, Data Visualization

Experience

Full Stack Developer

Jun 2023 - Present

iQuadra Information Services

Atlanta, GA

- Engineered **serverless** Manufacturing Queue web apps, allowing Bernard Group's warehouse coordinators to monitor jobs & track the status of orders
- Architected AWS CloudFormation Stack for the Queues establishing duplex connections thorough NodeJS Lambdas with dynamoDB via WebSocketAPI, to stream & update operational live data, eliminating network latency by 18%
- Designed an Natural Language Processing based web scraping model using Spacy Python, esclating iQuizUAnswer marketing productivity by 55% in outreach activities cutting down manual search
- Implemented a responsive app with **Redux** based ReactJS state management & **NodeJS** backend empowering the marketing team with an interactive dashboard to access web scrapped data stored in AWS RDS

Data Engineer

July 2021 - Aug 2022

Bengaluru, India

Wipro Limited

- Built logical schema of organisational process, performed **ETL** procedures & carried out validation for sustainability KPI of 3 affiliates in SABIC Corporation using the data historian software
- o Conducted data migration for all organizational elements from Microsoft SQL Server to OSIsoft Servers for further analytics
- Designed interactive **Tableau** dashboards for comprehensive visualization of sustainability KPI metrics, collaborated with clients to identify & implement a targeted **6% reduction** in CO2 emissions

ACADEMIC PROJECTS

Moving Object Trajectory Data Visualization

Nov 2022

 $Spark\ SQL,\ Scala,\ Finagle\ API,\ React,\ Deck.gl,\ JavaScript$

Arizona State University

- Developed a full-stack application leveraging Spark SQL to perform Spatial range, Spatio-temporal range & KNN
 queries on NYC taxi trips dataset enabling efficient data exploration & decision-making based on spatio-temporal aspects
- Implemented query result retrieval using the **Finagle API** in **Scala**, allowing seamless communication with the backend to retrieve & process query results within **300 milliseconds** on an average
- Rendered realtime responsive spatial visualizations enabling stakeholders to understand movement patterns, identify hotspots, & make informed decisions for urban planning with the **deck.gl React** library

Air Quality Prediction App

Apr 2021

Python, TensorFlow, Scikit-learn, Seaborn

Vellore Institute of Technology

- \circ Utilized OpenWeather API to retrieve **real-time** weather for predictive analysis & developed web app that forecasts PM2.5 levels with a trained **random forest ML model** that has an accuracy of 67%
- Achieved **3rd** rank at the 2021 Saltiga **IEEE Conference** by conducting data mining for optimal model selection using historical pollution data & presenting compelling findings from **Exploratory Data Analysis**

Facial Detection based Attendance Management System

Nov 2020

Python, OpenCV, ReactJS

Vellore Institute of Technology

- A python-based face detection/recognition system designed using Haar Cascade & Linear Binary Pattern Histogram algorithm for campuses to regulate entry of only fully vaccinated individuals.
- o Leveraged OpenCV for robust image processing, coupled with an adaptive & responsive user interface using ReactJS

SKILLS

- Languages: Java, JavaScript (ES13), Python, C/C++, TypeScript, SQL, Scala
- Databases: MySQL, PostgreSQL, MongoDB, DynamoDB
- Web Technologies: React, Redux, , Node.js, Vert.x, SpringBoot, HTML/CSS, Websocket API, RESTful API, GraphQL
- Machine Learning Libraries: TensorFlow, PyTorch, Scikit-learn, Spacy, Matplotlib, SciPy, Numpy, Pandas
- Tools: Git, Postman, JUnit, Selenium, Linux/Unix, Jira, AWS(Lambda, APIGateway, EventBridge, S3), Tableau, Jenkins, CI/CD