MAHESH GOPINATHAN

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EDUCATION

New York University, Tandon School of Engineering, Brooklyn, NY   **May 2021**
Master of Science in Computer Science | GPA - 3.82/4
- Coursework: Algorithms, Java, Big Data, Machine Learning, Cloud Computing, Computer Networks, Application Security.

Dayananda Sagar College of Engineering, Bengaluru, India   **July 2016**
Bachelor of Engineering in Information Science and Engineering | GPA - 3.75/4

TECHNICAL SKILLS

- **Languages**: Java, Python, JavaScript, TypeScript, C, HTML, JSON, XML.
- **Technologies**: NodeJS, ExpressJS, REST API.
- **Tools/ Frameworks:** Hadoop, Map Reduce, Kafka, Apache Spark, Elastic Search, Git, Docker.
- **AWS Services**: EC2, S3, Lambda, Lex, Kinesis, Rekognition, SNS, SQS, API Gateway, CloudFormation, Terraform.
- **Database & Operating Systems**: MySQL, MongoDB, DynamoDB, Linux.

PROFESSIONAL EXPERIENCE

Software Development Intern, **M&M Trading Co. LLC**, San Francisco, USA   **May 2020 – Jul 2020**
- Developed various features for an MVP Web App on MERN stack that offers users to design kitchen cabinets online.
- Designed and implemented the Product structure by creating a new database schema using NodeJS and Mongoose Schema.
- Integrated with backend services like Twilio to send and receives SMS by utilizing webhooks. Migrated legacy data from Excel sheets into MongoDB using starter scripts also modifying the schema definition in the process.
- Successfully automated the CI/CD, build & deployment process into Digital Ocean using Bitbucket pipelines and shell scripts.

Senior Software Engineer, **Doppio Group,** Bengaluru, India   **Jan 2019 – Jul 2019**
- Built software solutions in Java between an MES (Manufacturing Execution System) and an Infor M3 Cloud ERP.
- Engineered a high-level design discussion to formulate a plan for cloud migration and its execution for a global ERP rollout.
- Improved the tax calculation process by 50% using Avalara's REST API calls and used shell scripts to schedule repetitive tasks.

Software Engineer, **Doppio Group,** Bengaluru, India   **Jul 2016 – Dec 2018**
- Developed EDI software solutions to facilitate document flow between ERP systems and third-party apps using REST APIs.
- Acted as the subject matter expert while recommending solutions to process EDI transactions
- Designed and coded programs to process Payments in real-time between various bank systems using Java and ERP tools.
- Automated financial payments between banks and various clients using ACH transactions.
- Utilized Agile methodologies in sprint planning, project timelines, task estimation, development, code testing, and code review.
- Achieved 50% increase in search program efficiency in the ERP software tool by customizing and remodeling the search patterns.

ACADEMIC PROJECTS

Smart Door Authentication System (AWS Kinesis, Rekognition, SNS, Lambda, S3, DynamoDB)   **Spring 2020**
- Built a scalable cloud system that authenticates user faces in real-time in AWS Kinesis Video stream and AWS Rekognition.
- Provides users access to the virtual door by matching the FaceID from Rekognition and the OTP send to their phones.

Voice Based Photo Album Search (AWS VPC, Rekognition, Transcribe, Elastic Search, Lambda, S3)   **Spring 2020**
- Configured a VPC instance to build a serverless Photo Album app in cloud to search photos in S3 using both text and speech.
- AWS Rekognition services would tag the photos and Elastic Search would index them at the time of Upload.

AI Customer Service Chatbot (AWS S3, Lambda, Lex, Elastic Search, DynamoDB, SQS)   **Spring 2020**
- Established a serverless chatbot using AWS Lex to process user input and gives recommendations of restaurants.
- Fetched data from Yelp and stored it in DynamoDB and Elastic Search. The endpoints were managed in cloud via API Gateway.

Life Expectancy Predictor (Kafka, Spark, ELK Stack, Apache Spark, Spark Streaming)   **Fall 2019**
- Created a streaming application using Kafka producer to generate data, Spark streaming to stream data to Cassandra.
- Transformed data with Apache Spark, implemented a ML model with Spark ML & visualized the predicted output in ELK Stack.

JSON Parser (Hadoop Map Reduce, Java, JSON)   **Fall 2019**
- Developed a simple JSON parser in Hadoop that reads an input file in JSON format and validates it.
- Implemented a custom input format in Hadoop that splits and reads huge JSON files contained in a zip file.

CERTIFICATIONS AND EXTRA-CURRICULAR

- Certified AWS Cloud Architect and Blockchain Developer from Udacity and Machine Learning by Stanford Online.
- Certified – "Infor Certified M3 Integration Consultant" - ERP Industry Certification by Infor.
- Published a Paper at IJIRCCE June 2016 titled - "Credit Card Transaction with Face Recognition Authentication".