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 - 3.72/4

- Coursework: Algorithms, Java Programming, Big Data, Machine Learning, Cloud Computing, Computer Networks.

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

- Coursework: Algorithms, Data structures, Database Systems, Software Engineering.

TECHNICAL SKILLS

- **Languages**: Java, Python, JavaScript, TypeScript, C, HTML, CSS.
- **Technologies**: NodeJS, JSON, XML, REST API's, React.
- **Tools/Frameworks**: Kafka, Apache Spark, Elastic Search, Kibana, Git, Swagger, Postman, Docker.
- **AWS Services**: EC2, S3, Lambda, Lex, Kinesis, Rekognition, SNS, SQS, API Gateway, CloudFormation, Terraform.
- **Database and Operating Systems**: MySQL, MongoDB, DynamoDB, Windows, Linux, macOS.
- **Domain Knowledge**: Web & Software Development, ETL, Supply Chain, Finance, Machine Learning.

PROFESSIONAL EXPERIENCE

Software Development Intern, **DodiHome**, San Francisco, USA **May 2020 – Jul 2020**

- Developed various features for an MVP Application that offers users to design and order kitchen cabinets online.
- Designed, implemented the Product structure to fit the business requirements using NodeJS, MongoDB, and Mongoose Schema.
- Successfully automated the CI/CD, build & deployment process into Digital Ocean using Bitbucket pipelines and shell scripts.
- Migrated legacy data from Excel sheets into MongoDB using starter scripts also modifying the schema definition in the process.
- Integrated the application with backend services like Twilio to send and receives SMS by utilizing webhooks.

Senior Technical Consultant, **Doppio Group,** Bangalore India **Jan 2019 – Jul 2019**

- Built an integration solution 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 efficiency of a tax calculation program by 70% using REST API calls and shell scripts to schedule repetitive tasks.

Technical Consultant, **Doppio Group,** Bangalore, India **Jul 2016 – Dec 2018**

- Developed EDI software solutions to facilitate document flow between ERP systems and third-party apps using REST APIs.
- Designed and coded solutions to process Payments in real-time between various bank systems using Java and ERP tools.
- Utilized Agile methodologies in sprint planning, project timelines, task estimation, development, code testing, and code review.
- Increased the search program efficiency in the ERP software tool by 50% by customizing and remodeling the search patterns.

PROJECTS

Smart Door Authentication System (AWS Kinesis, Rekognition, SNS, Lambda, S3, DynamoDB) **Spring 2020**

- Used AWS Kinesis Video stream and Rekognition to build a cloud system that authenticates faces in real-time.
- Provides users access to the virtual door by matching the FaceID 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**

- Developed 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**

- Developed a streaming application using Kafka producer to generate data, Spark streaming to stream data to Cassandra.
- Used Apache Spark to load and filter data, built Machine Learning model using Spark ML to predict Life expectancy.
- Used ELK stack to create dashboards and visualizations to update life expectancy prediction data in real-time.

Credit Card Transaction Authentication (Java, JSP, MySQL) **Spring 2016**

- Built an application for a credit card transaction system to integrate with the face detection and face recognition technology and authenticate the transaction by matching the face already stored in the system.

CERTIFICATIONS AND EXTRA-CURRICULAR

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