REUBEN M. V. JOHN

Raleigh, NC, USA | reubenvjohn@gmail.com | +1 302-898-6894 | linkedin.com/in/reubenmvjohn

EDUCATION

North Carolina State University, USA ***Aug 2021 – May 2023***
Masters in Computer Science
Manipal Institute of Technology, Manipal University, India ***Jul 2014 – Jul 2018***
Bachelor of Technology in **Computer Science** and Engineering; CGPA: **8.58** / 10; Minor: Artificial Intelligence
Relevant Courses: Artificial Intelligence, Machine Learning, Software Engineering, Distributed Cloud Computing

TECHNICAL SKILLS

Programming Languages: Java, Javascript, Typescript, Python, C#, C++
Backend: REST (Jetty, Jersey, Apache Tomcat), GraphQL, Kubernetes, Terraform, Docker, Node.js, Microservices
Frontend: React JS, Redux, HTML, CSS, UI UX design
Databases: SQL, DB2, SAP IQ (big-data warehouse), NoSQL, Mongo, Reladomo ORM, Legend (enterprise data modelling)
Other Technologies: Apache Spark, Git, Subversion, GitLab CI/CD, Jenkins, JIRA, AxiomSL
Artificial Intelligence/Machine Learning: Tensorflow, OpenCV, Robot Operating System (ROS), Robotics, Planning & Navigation

PROFESSIONAL EXPERIENCE

GOLDMAN SACHS, Bengaluru, India

Associate**, Goldman Sachs* ***Dec 2020 – Jul 2021

- Built a new data pipeline (using Java & Apache Spark) that **reports deep insights on millions of credit cards to the US Government**, resulting in a 35% increase in data bandwidth and contributing to a decade of increased economic stability
- Designed a data model for 100 million loan data points on **SAP IQ big-data warehouse**, improving SQL performance by 50%
- Proposed & built a new Typescript framework that translates user requirements to cross-platform applications, using **Node.js, Docker, Kubernetes & Terraform** increasing transparency for clients and reducing development time & bugs

Analyst**, Goldman Sachs* ***May 2018 – Dec 2020

- Architected an analytical reporting platform that **eliminated 3 existing and many future bespoke applications**
- **Worked closely with the firm's technical fellow** on the platform to design a well-scrutinized microservice ecosystem
- **Deployed the business unit's first GraphQL backend** (Java, Mongo) and contributed to GraphQL adoption in other BUs
- Designed user experiences and implemented a new enterprise **React - Redux** frontend in Typescript

Intern**, Goldman Sachs* ***Jan 2018 – May 2018

- Implemented a new high-stakes profit optimizer in Java, saving large expenses between international subsidiaries
- **App certified by Ernst & Young** for technical architecture: sophisticated SDLC, SCM, data controls (access, transparency, lineage, reproducibility), inter-continental datacenter contingency, service breach monitoring, etc

ACADEMIC PROJECTS

SANDBLOX **Oct 2017 – *Oct 2018***

- Created a machine learning DSL library for rapidly building modular Tensorflow models through python meta-programming
- Utilizes **multi-processing, multi-threading, distributed computing, pipeline-ing** etc to achieve 70% CPU/GPU/IO utilization

Project MANAS **Sep 2015 – *Mar 2018***

- Led a team of 40 engineers to **build a 'level-2' driverless car**, coordinated 3 divisions: AI, Sensing & Automation, Mechanical
- Implemented the car's AI, Deep Learning and interfacing in C++, Python (**Tensorflow**, OpenCV) & ROS (Robot OS) and personally **demonstrated the car to dignitaries** including the university director, and the CEO of Nokia
- Integrated the navigation system using path planning algorithms such as A*, TEB, etc and fused 3D point cloud data from RADARs, LIDARs and stereo cameras to map and navigate (3D SLAM) controlled environments with over 90% reliability
- Qualified among the top 10 in a one-million-dollar national driverless electric car competition
- Presented the sponsored Deep Learning research at the NVIDIA Quadro event in their Mumbai headquarters
- Founded and led the planning sub-division in 2016 that built the car's core navigation systems and virtual simulators

EXTRA-CURRICULAR ACTIVITIES

- Awarded as **TEDx speaker** from TEDXManipalUniversity in 2018 for a speech on "We're engineering a mind, so should you"
- Worked as a volunteer for developing non-profit rural school buildings in 2019 and afforestation work in 2017
- Mentored the 2019 Grand Prize winners of the International 'Intelligent Ground Vehicle Competition' at Michigan, USA