ABHIJITH RAMALINGAM

✉ abhijith.ramalingam@live.com
 github.com/Abhijith1995
in linkedin.com/in/abramalingam

Pursuing full time roles within Toronto | Open to remote roles

WORK EXPERIENCE

Backend Developer | Hubba
Sept 2018 - Dec 2020

- Developed technical solutions and features for an ecommerce marketplace using microservices built with **Node.js, MongoDB, RabbitMQ, AWS**.
- Made architecture upgrades to a tangled, legacy microservices approach by using a **GraphQL** gateway, thereby reducing API overhead.
- Collaborated with a data team to build a realtime ETL service that aggregates data from different sources to Salesforce using **Python, PubSub, Kubernetes** , in order to deliver time-sensitive, targeted information to inside Sales teams, leading to increases in key sales figures.

Software Engineering Intern | Amazon (A9.com)
May 2017 - Aug 2017

- Worked on the **core infrastructure** of the **Advertising Data Platform**, that stores and processes data from the Amazon Ad Exchange. The team is Amazon's largest data platform and handles **tens of petabytes** of data monthly.
- Reduced data storage costs by modifying open source **Hadoop** code to integrate with an internal Amazon service, allowing analysts to create **Hive** jobs and write distributed queries on encrypted data stored in **AWS S3**.
- Performed benchmark tests with **Hive**, querying terabytes of data to compare performance tradeoffs at scale between **HDFS** and **S3**.

Software Development Intern | Capital One Canada
Sept 2016 - Dec 2016

- Developed a **secure**, **highly-available** infrastructure for releases of Data Science projects using **EC2, Docker, Terraform**.
- Wrote a **Node.js API** that integrated with internal data models and services, to present Mobile Beta users with their predicted recurring monthly credit card transactions.

Distributed Systems Engineering Intern | Wave Inc.
Jan 2016 - April 2016

- Developed scalable, fault-tolerant **backend APIs** with **Python** and **Django** for a cloud-based accounting product.
- Stored each database change as a sequenced, immutable and queryable event (**Event Sourcing**) for **scalability** and **auditability**.

TECHNICAL SKILLS

Languages: Python, JavaScript, Typescript, Java, C/C++

Data Analysis: Numpy, Pandas, Matplotlib, Scikit-learn,

Dev Ops: Bash, Docker, Kubernetes, Terraform, AWS ECS, RabbitMQ

Web: HTML/CSS, Node.js, Express, React, Django, Flask

Database: MySQL, PostgreSQL, MongoDB, Redis

PROJECTS

Smart Vents : (Sept 2017 - March 2018) Cloud Lead for an IoT (Internet of Things) system that lets users control individual room temperatures inside their homes using a smart vent system and a smart thermostat. Won a $500 award for "Best IoT Project" at the Mechatronics Engineering Design Symposium. *Tech Used: Python, Node.js, AWS (IoT, EC2, S3), Heroku, MongoDB*

Autonomous Mobile Robotics Labs: (Sept 2017 - Nov 2017) Implemented path planning, mapping and localization for a small personal robot (turtlebot) as part of coursework for "Autonomous Mobile Robots". *Tech Used: C++, ROS*

Personal Finance Chatbot : (October 2016) Developed a Facebook Messenger chatbot that allows individuals to keep track of their finances, set savings goals and visualize their spending patterns. *Tech Used: Python, Flask, Node.js, Express, AWS EC2, MongoDB, jQuery*

EDUCATION

University of Waterloo
Sept 2013 - April 2018

- BASc in Mechatronics Engineering, Honours, Co-operative Program. Graduated with distinction.
- **Relevant Coursework:** Algorithms and Data Structures, Real time Operating Systems, Embedded Microprocessor Systems Statistical Analysis, Autonomous Mobile Robots, Pattern Recognition, Design and Analysis of Algorithms

Online Coursework - Coursera

- **Machine Learning**
- **Intro to Recommendation Systems**
- **Exploratory Data Analysis**