Hassan Raja
http://hassanraja00.github.io/

Email : rajahassan12@gmail.com
Mobile :

Work Experience

- **Amazon** NY, NY
  Software Development Engineer *Feb 2022 - Mar 2024*
  - Generated $1M+ in annual revenue and increased the invalidation accuracy by 60% for Amazon Sponsored Ads by building a high-scale, latency sensitive ad processing feature. Built with Java, Spring, AWS DynamoDb, Lambda, S3 and CloudWatch.
  - Enabled 60% more accurate billing and with more granular statistics for advertisers by implementing the architecture that fetches and processes private user data in order to validate various ad-types within Sponsored Ads. Built using Java, Kotlin, AWS ECS, Lambda, VPC on a CI/CD pipeline.
  - Achieved a 60% reduction in backfill time of failed cron-worker jobs that update Ads clients' budgeting dashboards by developing an event-driven service to automatically catch discrepancies and correct them. Built with Java, Scala, AWS Step Functions, S3, DynamoDb, Lambda and CloudTrail.
  - Optimized overall system availability and performance by reducing deployment rollback time by 40% and fleet scaling by 70% through automation of manual processes. Scripts built with Bash, Python, Java and AWS Lambda functions.
  - Increased team efficiency with a 30% reduction in average review time and 15% decrease in the number of defects per release by mentoring peers, reviewing code, deployments, and system designs of multiple backend services.

- **Riz Raja Professional Services Inc.** LIC, NY
  Software Engineer *June 2018 - December 2023*
  - Pioneered digital business model by developing an online payment and document storage system, saving Mr. Raja time with clients to help them get back on the road. Built with .Net Core, C#, SQL, and AWS S3, SNS.
  - Increased Mr. Raja's daily client volume for 3 successive years by developing a client-side application to save and retrieve 1000's of tickets based on search criteria. Built with ReactJS, Typescript, MS SQL Server.
  - Increased visibility of Mr. Raja's firm by 30% via implementation of portfolio site to inform clients on the services provided by the firm. Built with HTML, CSS and Javascript.

Technical Skills

- **Languages:** Java, Scala, Python, Javascript, TypeScript, C#, Kotlin, C++
- **Technologies:** AWS Cloud, Git, Spring Boot, NodeJS, Flask, ReactJS w/ NextJS, AngularJS, .Net Core, MongoDB, MySQL, PostgreSQL, CI/CD on Jenkins
- **Design Patterns:** Strategy, Builder, Singleton, Facade, MVC, Micro Services Transactional Design Patterns, 12-Factor Application

Education

- **Stony Brook University** Stony Brook, NY
  Bachelors in Computer Science; GPA: 3.70

Personal Projects

- **NBA-Rank:** Scrapes Reddit to rank how popular and well-liked NBA players are. Metrics determined with Reddit and VADER Sentiment ML APIs. Built platform with MERN stack and Bootstrap.
- **Music QA:** NLP program that uses Recurrent Neural Networks with a GRU and the Hugging Face transformers on a BERT-Base-uncased network to provide answers to yes/no questions with accuracies from 70-75%.
- **US Congressional Redistricting:** Web application that provides different possible redistrictings for different US states given a set of constraints and displays them on a geographical map. Built with Jersey, React, MySQL. Data preprocessed with GeoPandas.

Awards

- **Technical Excellence Award** (Amazon) Recognized for generating an additional $1M+ for Sponsored Ads in April 2023.
- **Most Fun Hack** (NYHacks) Received for creating the most socially popular program September 2019.