Nickson Thanda

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EXPERIENCE

Software Engineer, Zuhlke Engineering - London, United Kingdom September 2018 - Present Worked in small teams providing consulting services using Test-Driven Development to multiple companies across different industries.

- Developed APIs within the backend for the NHS Covid-19 contract tracing mobile app
 - **Tasks:** Developed Lambda services to store and process data submitted by the app and external systems, distribute data to the app with these services being behind an API gateway.
- Created a proof-of-concept IoT multi-sensor tracker to track and measure the condition of cargo for a leading insurance company
 - **Tasks:** Development of the program to connect to the hardware sensors and then to convert the raw data returned into an appropriate unit of measure and save this information to a SD Card.
- Created a digital platform using Google Cloud that would enable a leading insurance company to import IoT tracking data to improve risk modeling allowing them to identify trends and insights.
 - Tasks: Development of the user's registration, authentication, authorisation and accounting services integrated with the front-end, Google Cloud's Firebase and SendGrid. Development of services that connect to the database storing tracker data and returning the data to the front-end in JSON
- Developed a service that would enable third-party providers to access customer data securely for a leading global retail bank in order to comply with new regulations.
 - Tasks: Created AWS lambdas to react to notifications, validate them, query REST APIs and insert data into AWS RDS database. Created Terraform scripts to build AWS services. Setup and configured NGINX reverse proxies for each site.

Database Developer (Intern), Kurtosys - London, United Kingdom August 2016 – September 2017 Operated in a InvestorPress product team as part of a fintech firm - providing digital services to financial service clients.

- Produced and maintained SQL Server stored procedures and databases.
- Worked within teams of Java developers creating queries and handling database-related issues.
- Designed a Slack notification bot that flags data syncing issues between SQL Server and MemSQL.

Consultant, QConsult (project sponsored by J.P Morgan) - London, United Kingdom September - October 2015 Researched and consulted on marketing strategy to Playlab, a startup building a mobile app for anxiety sufferers.

- Researched marketing recommendations including targeted online advertising and grassroots efforts.
- Presented market research findings to both Playlab leadership and a senior panel of J.P Morgan employees.
- Increased user downloads of the application by 20% through our marketing.

Technology Spring Intern, Goldman Sachs - London, United Kingdom

April 2015

Member of a six-person team to create a plan for porting a desktop application used for foreign exchange monitoring for use on iOS/iPad.

- Independently designed a mockup to demonstrate the application's look and feel on an iPad.
- Gathered requirements from desktop app users to research risk for new app.
- Presented plan to a group of clients, other interns, and company leadership.

PROJECTS

Songbird - Imitation of celebrities

September 2018 - May 2019

Final year university dissertation aimed to research the feasibility of creating a game with the objective of imitating a celebrity and receiving a score based on the similarity of the speech. I was able to develop mobile and desktop prototypes to accomplish this. The game had stages that contained different speech recordings for users to attempt to imitate.

- Researched and implemented existing techniques on speech extraction and speech similarities.
- Developed GUI desktop application in python that would compare the user's recording to the stored speech recording of the celebrity and to return a score that would be stored. The application allowed users to register and log-in and see high score for the different stages
- Developed an android application that worked similar and was in sync with the desktop application.
- Used Amazon RDS to store the celebrity recordings, the user accounts and their scores and Amazon S3 to store the speech recordings, EC2 with a web server so that the android application can compare the scores exactly the same as the python application.

EDUCATION

BSc Computer Science with Industrial Experience, Queen Mary, University of London September 2014 - June 2018 Degree Classification - First Class Honors Science and Engineering Excellence Scholarship (2014 - 2016)

SKILLS

Programming Languages: Java, Kotlin

Platforms: Amazon Web Services, Google Cloud

Tools: Git, Docker, Terraform