Viruj Bala Soupramanien

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A mechanical and software engineer. I solve both real and virtual world problems.

WORK EXPERIENCE

Accenture Services Ltd

Mauritius

Application Development Associate

Apr 2021 - Present

- o Full Stack Developer: Web and mobile app development using ASP.NET, Springboot and React Native
- o Team Dev Environment: Set up local custom development environment for the team using Docker and Unix scripting
- o IoT Workshop: Hosted workshop at the University of Mauritius on IoT devices, Azure Services and Power BI
- o Eco Innovation Presenter: Presented Master's thesis to global Accenture

Water Research

Mauritius

Project Coordinator Feb 2020 - Sept 2020

- o International Operations: Kick-started international operations in neighbouring island Reunion
- o Digitizing Workflow: Created Excel application using VBA to digitize foreman daily procedures
- Engineering: Conducted geotechincal investigations and surveys

Air Mauritius Ltd

Mauritius

Mechanical Engineer Intern

Dec 2018 - Feb 2019

- o Air-frame and Mechanical Systems: Training, processing documents & setting up aircraft maintenance tasks
- Wheels & Brakes Workshop: Maintenance/repair of aircraft wheels and brakes
- o NDT: Non-destructive testing on aircraft

Hotel Istana KLCC

Malaysia

Engineering Intern

Dec 2017 - Jan 2018

o Maintenance: Routine maintenance of HVAC, electrical systems, cooling towers, pumps and plumbing system

CERTIFICATIONS

• AWS Cloud Practitioner Certification: Nov 2021 - Nov 2023

SKILLS SUMMARY

- Languages: English, French
- Soft: C#, JavaScript, Python, SQL, Java, HTML, CSS, Unix scripting, Matlab, PHP, VBA, Wolfram
- Tools: Docker, ASP.NET, Springboot, GIT, JS Frameworks, Arduino, Office, Solidworks, ANSYS, Simulink

Projects

- Leak Detection and Localization in Water Pipelines using an Ensemble Deep Learning Classification Model: Investigated and implemented an AI algorithm using python to detect and localize leaks in a water distribution network. The model was also trained to detect the pipe material transporting the water.
- A Mathematical Modelling Study of the Effects of Air Expansion Inside the Brain on the Intracranial Pressure: Built a mathematical model in Matlab to simulate the effects of pressure and temperature on the intracranial pressure, due to expansion of trapped air in the brain.
- Digitizing Daily Workflow:

Developed an Excel app using VBA to facilitate foreman data logging. This helped increase productivity and decrease wait-time for engineers to receive data.

• Warman Competition:

Designed and built a robot to carry out a series of tasks. The robot was automated using an Arduino board.

• Expense Tracker Mobile App:

Built a mobile application using React Native to keep track of expenses. Used bio-metric authentication and google firestore to backup data. SQLite was used as the database.

• Recipe App:

Built a recipe web and desktop application using Solid JS and themealdb api. Tauri was used to build the desktop app.

• Numerical study on the role of radiation view factor in thermal performance of straight fin heat sinks: Using wolfram, investigated the thermal performance of straight fin heat sinks.

EDUCATION

University of Mauritius

Mauritius

Masters in Applied Software Technologies

Sept 2020 - Sept 2021

Monash University Malaysia

Malaysia

Bachelor of Mechanical Engineering (Honours)

Oct 2015 - Oct 2019