Kartike Khandelwal

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Software Dev | AI and Machine Learning | Java | C++ | JS | C | SQL | Linux Bash | Python | CI/CD Testing | RPA | Data Analytics | AWS | Docker | Networks and IOT | Git | Full-Stack

Work Experience

Application Development and RPA Automation, Trilogy Technologies

April 2018 - Aug 2018

- Worked in a team engineers to operate and program a robotic arm to remove and place Library Books from a shelf guided by computer vision. Used python libraries like TensorFlow, Keras and PyTorch.
- Directly responsible for developing library to facilitate joint angle to movement vector translation.

Machine Learning Research Intern, Panasonic

April 2019 – Aug 2019

- Worked on a solo research project to implement voice identification and Text to Speech for a research application.
- Implemented licensed deep learning models [paper from IISc and Columbia University] resulting in 3% accuracy improvement for speaker verification.
- Trained various CNN models (LSTMs) and for speaker verification in Python using Keras and PyTorch Libraries.

Al Voice talk-bot designer, Wiz.ai

April 2020 – Aug 2020

 Designed and optimized automated call systems for customized client applications. Designed scripts and perfected call responses.

Data-Science Engineer, Sembcorp Renewables

June 2021 - Jan 2022

- Reverse engineered code and analysed sound signatures from wind turbines. Developed scripts to replicate data encryption, reducing data processing time by >90%.
- Figured out how to unencrypt data from IOT transmissions and used the data for statistical analysis.

Projects

Static Program Analyzer

April 2021

- Designed the architecture of a programming language analyser to validate and parse code from a simple query language.
- Built an automation testing pipeline that reduced test times by 70%, saving an average of 10 hours per week.
- Built an API [C++] to parse the language tokens and validate them using REGEX and language parameters.

SyncSense – A Wind Turbine Start-up [syncsense.co]

May 2022

- Founded and ran SyncSense a start-up in the business of wind turbine O&M.
- The start-up was Awarded over 10,000SGD in grants. Learned the product development lifecycle. Developed analysis and classification models. Created financial projections, managed the business.

Mentorship

IEE NUS

• Taught 4 classes on Python and OOP basics. Conducted workshops on using Raspberry Pi and open-source libraries.

Education

National University of Singapore – School of Computing

2018 - 2023

• Bachelor of Computing with specialisation in Networks and AI.