David Huynh

Data Analyst

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As an experienced engineer, I have collaborated with a diverse range of business partners, from small-scale enterprises to national project contractors. Over two years in engineering, I have played a pivotal role in client requirement analysis, programming, troubleshooting, and system upgrades, significantly mitigating downtime and reducing unnecessary expenses. Recently graduating with a Master's degree in IT, majoring in Data Science, I am transitioning to the IT field with a passion for leveraging data and AI technologies to solve business problems. As I embark on my journey in data analytics, I am eager to apply my technical expertise and data-driven approach to drive innovative solutions and enhance operational efficiency.

Skills

Data analytics: Python (Jupyter Notebook, Amazon SageMaker, Google Colaboratory), SQL, MS Excel
Database: PostgreSQL, MySQL, SQLite
Libraries: TensorFlow, Keras, Pandas, NumPy, Scikit-learn, PyTorch
Visualization: Tableau, PowerBI
Collaboration tools: Confluence, Slack, Notion, Microsoft Teams, Trello, Jira
Libraries: TensorFlow, Keras, Pandas, NumPy, Scikit-learn, PyTorch
Project management: Dynamic Systems Development Method (DSDM), Scrum, Agile
Cloud platforms: Amazon Web Services (AWS), Google Cloud Platform (GCP)

Professional Experience

Assistant Technology Support Officer (Specialists)
Queensland University of Technology (QUT)   Jul 2024 – Dec 2024

- Collaborated with specialists to troubleshoot and support application software in Specialist Teaching Computer Labs, significantly boosting user satisfaction.
- Developed iteratively an integrated web application for asset management using React framework and MySQL, enhancing existing database management systems.
- Deployed hardware alongside peripherals, system images and re-configuration while maintaining the knowledge material.

Automation Engineer
SISTECH Co., Ltd   Oct 2020 – Jan 2023

- Worked closely with cross-functional teams to analyze requirements, develop project plans, and inspect the installation and commissioning of automation systems.
- Engineered PLC programs to automate over 20 manufacturing processes, enhancing operational efficiency and precision in various manufacturing domains including power, food and beverage, materials.
- Designed and implemented centralized SCADA systems for comprehensive data visualization and real-time analysis, improving decision-making processes and operational efficiency.
- Integrated IoT devices to monitor and optimize equipment performance, achieving a 10% reduction in downtime through predictive maintenance.
- Conducted over 15 training courses for business partners, significantly improving overall workforce productivity and knowledge base.

Project

Data engineer
COVID19 infection risk prediction   Sep 2024 – Nov 2024
Trained multiple classifiers to predict the COVID-19 infection risk from a large tabular database.
Key achievement:
- Performed feature selection technique to refine the useful attributes for the classification task using InfoGain and GainRatio evaluator.
- Correctly classified 95.32% instances of COVID-19 infection cases using the PART classifier.
- Integrated cost sensitive analysis to minimize false positive error, improving the overall reliability.

Machine learning engineer
Automated Fungi Classification   Jul 2024 – Sep 2024

Established and recommended a machine learning model to classify fungi species (edible or poisonous) based on photographs submitted by users.
Key achievement:
- Utilized PyTorch, Scikit-learn libraries in Jupyter Notebook environment to split, process and transform training and validation dataset.
- Developed and fine-tuned deep learning models with neural networks, specifically employing ResNet and the DINO model as foundational frameworks for image classification, achieved an average accuracy of 92.5% in identifying fungi species.

Data scientist
Bushfire prediction platform (OreFox AI Limited)   Mar 2024 – Jun 2024

Worked in a multidisciplinary team to develop an integrated platform that could accurately predict fire and sent out warning notifications of incidents.
Key achievement:
- Analyzed business requirements and applied Agile framework to manage the project using Jira, Notion.
- Collected and processed data from various geospatial sources, including Google Earth Engine, NASA, and open datasets from AWS S3 and Google Cloud Storage in multiple formats.
- Built predictive CNN/LSTM machine learning models and achieved an accuracy of over 85.2%.

Data Analyst
Queensland Government's Advance Queensland program   Apr 2024 – May 2024

Analyzed the publicly structured and unstructured data on the distribution of the funds and solicited insights for user's decision-making process in terms of charts and narrative reports
Key achievement:
- Performed multiple Data Analytics Cycle (QDAVI) to generate significant questions to achieve actionable recommendations.
- Collected a set of 100+ articles using Guardian APIs for unstructured data analysis.
- Visualized the insights in Jupyter Notebook (Python) environment to support business advancement and operation.

Education

Master of Information Technology – Data Science
Queensland University of Technology   Feb 2023 – Nov 2024

Master of Engineering – Control Engineering and Automation
Ho Chi Minh City University of Technology (HCMUT)   Oct 2018 – Apr 2021

Bachelor of Engineering – Control Engineering and Automation (Honor)
Ho Chi Minh City University of Technology (HCMUT)   Sep 2014 – Aug 2018

Volunteer
- QUT Orientation Assistant (Sessional Facilitator, Interviewer)   Feb 2024
- QUT Peer Learning Facilitator (STIMulate, IT stream)   Feb 2024 – May 2024
- TEDxQUT Event Assistant/Designer   Nov 2023
- Event Officer/Coordinator (QUT Business Analysis and Data Science Club) Jul 2023 – Jun 2024

Professional membership
- Australian Computer Society (ACS)
- QUT College of Excellence
- QUT Business Analysis and Data Science Club (QUT BANDS)

References
Upon request