Cherline Delfina Tandra

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EDUCATION

Monash University
Master of Artificial Intelligence July 2023 - Present
Bachelor of Commerce (Business Analytics) February 2021 - July 2023

EXPERIENCE

Monash DeepNeuron
Artificial Intelligence Engineer April 2023 - Present

- Worked on various AI projects focused on classification and detection using convolutional neural networks and image generation with graph neural networks.
- Led a team of 5 as a lead researcher, focusing on enhancing current GNN models.

180 Degrees Consulting
Lead technical consultant July 2023 - January 2024

- Led a team of 7 in the successful development of a web application for Mobilise, utilising ReactJS, Django, and PostgreSQL, deployed with Heroku, and allocated tasks through Jira.
- Primary point of contact for client communications and bi-weekly progress updates through zoom.

Technical consultant February 2023 - June 2023

- Collaborated with a team of 5 to develop a safe sleep mobile application for Red Nose using JavaScript, TypeScript and React Native, and Integrated CMS using Rowy. Awarded for best content.

Monash Institute of Medical Engineering
Lead consultant February 2023 - July 2023

- Led a team of 4 to craft a comprehensive product launch business plan for the TAVI (Transcatheter Aortic Valve Implantation) stroke risk tool.

PROJECTS

Dehydration monitoring system | *Python, CNN, React Native, TypeScript, Django, CSS*

- Trained a convolutional neural network model to monitor dehydration, establishing individual hydration thresholds based on electrodermal activity changes and personal data
- Mobile app to alert family members in case of alarming dehydration in elderlies

StorySearch | *Firebase, OpenAI, ReactJS, Python, Tailwind CSS, and Vector Databases*

- AI-powered website providing positive learning experience via personalised picture books

Image generation using scene graphs and diffusion models | *Python, GNN (Graph Neural Network)*

- Developed a generative model (diffusion models) that utilises a GNN backbone to generate images from scene graph descriptions.

Skin lesion classification | Python, CNN (Convolutional Neural Network), VGG, ResNet, DenseNet

- Trained a CNN model for skin lesion classification, achieving 81% accuracy.

Real-time object detection for self driving car | Python, CNN, YOLOv7, OpenCV, transfer learning

- Conducted data cleaning on OpenCV's data and utilised it to train a YOLOv7 architecture CNN model for detecting road entities, fine-tuned the model through transfer learning.

TECHNICAL SKILLS

Languages*:* Python, R, C, JavaScript, Java, TypeScript, MiniZinc
Frameworks*:* React Native, React.js, Next.js, Three.js, Django. WebGL, HTML, Tailwind CSS
Databases*:* PostgreSQL, MySQL, Oracle Database, Microsoft Access, MongoDB, Firebase
Libraries*:* Pandas, NumPy, PyTorch, Seaborn, TensorFlow, FastAPI, Plotly, Matplotlib, scikit-learn