Ziteng (Andre) Zhang

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EDUCATION

Master of Electrical and Computer Engineering, Lakehead University, Canada **2025 - Present**
Master of Artificial Intelligence, Monash University, Australia **2020 - 2021**
Bachelor of Information Technology, La Trobe University, Australia **2016 - 2017**

SKILLS

Programming Languages: Python (5+ years), JavaScript, TypeScript, Java
Areas of Expertise: Computer Vision, Machine Learning, Front-end Development, CCNA
Tools & Frameworks: PyTorch, scikit-learn, OpenCV, Django, React.js

PROJECT EXPERIENCE

UAV Cloud Platform **Mar 2022 – Mar 2024**

- Led agile development, integrating data solutions that supported over 15 UAV monitoring missions.
- Trained and implemented PP-YOLOE, P2V-CD for object detection and change detection tasks.
- Applied data augmentation techniques, improving small target detection recall by 15% in UAV imagery.
- Developed a PSO-LSTM model for hazard prediction, achieving 85% accuracy in time-series forecasts.

Textile Inspection Machine **May 2021 – Mar 2022**

- Developed the fabric defect detection algorithm, improving accuracy from 0.1mm to 0.01mm.
- Applied code optimization enhancing model inference speed from 0.35m/s to 0.5m/s.
- Upgraded product using unsupervised methods instead of traditional supervised learning, increasing the defect detection recall rate from 75% to 89% and precision from 92% to over 95%.

WORK EXPERIENCE

AI Technical Manager, Beijing Geo-Vision Info Tech Co., Ltd., China **Mar 2022 – Apr 2025**

- Led AI strategy and development for UAV Cloud Platform, achieving over 90% customer purchase rate.
- Formulated the company's strategy on AI and led AI business planning to align with corporate goals.
- Oversaw the entire AI development lifecycle with strong project management and technical expertise.
- Built and managed a 10-person AI team, conducting technical training that improved project delivery speed by 25%.

Machine Learning Engineer, Byte TO Future Co., Ltd., China **Mar 2021 – Mar 2022**

- Developed anomaly detection algorithms for Textile Inspection Machine.
- Engineered an AI-based visual inspection system for Mercedes-Benz, enhancing vehicle exterior quality checks by reducing inspection time from 15 minutes to mere seconds with 96% accuracy, significantly cutting manual labor costs and increasing customer satisfaction.

Data Analyst, EASI Pty Ltd., Australia **Sept 2018 – Dec 2019**

- Analyzed sales and delivery data, reducing operational costs by 10% through process optimization.
- Utilized data visualization techniques to facilitate corporate strategic planning.

PUBLICATIONS

"Safety Helmet Wearing Detection Based on Particle Swarm Optimization YOLOv7", ICIVC, Jul 2023

"Short-term Power Load Forecasting Based on Particle Swarm Optimization Long Short-term Memory Neural Network", EEBDA, Feb 2023