Phoo Pyae Pyae Linn (Lily) Senior Data Scientist

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United States

SUMMARY

Senior Data Scientist in developing data-driven applications, focusing on regression analysis, object detection, semantic segmentation, and audio analysis. Skilled in crafting models using both Deep Learning and Machine Learning algorithms within the Python ecosystem. I hold a strong conviction that dedicating time for research within AI projects is essential for achieving superior results.

SKILLS

Deep Learning
Machine Learning Algorithms
Statistical Analysis & Mathematical Modeling
Feature Engineering
Instance/Semantic Segmentation
Object Detection
Image Classification
Regression Models

TOOLS

Python
SQL
AWS
Huawei Cloud
Pytorch
Tensorflow and Keras
Scikit-learn
Pandas
Numpy
Matplotlib and Seaborn
Weight and Biases
MLFlow

RESEARCH INTERESTS

Continual Learning, Meta-Learning, Reinforcement Learning, Machine Learning, Deep Learning

PROFESSIONAL EXPERIENCE

PeafowlAI **July 2024 - Present**
Researcher **United States**

- Contribute to the research on low-resource languages such as evaluation metrics, and benchmarking datasets for low-resource languages.

Carro (Trusty Cars Pte Ltd) **Sept 2021 - July 2024**
Senior Data Scientist I **Singapore**

- Showroom Car Image Generation Project
  - Initiated and led the project to automate car imagery for online showrooms, significantly reducing manual workload by 60%.
  - Deployed models including U2Net and LAMA inpainting in Pytorch, boosting MAP by 79%.
- Car Damage Detection Project
  - Gained extensive experience by utilizing MaskRCNN with ResNet101, YOLOv8, Transformer, and ViT for car damage detection and segmentation.
- Car Audio Classification Model
  - Developed a ResNet50-based model for car audio classification, achieving 95% accuracy on a comprehensive test set, and enhancing vehicle diagnostic.

- Car Price Prediction Model
  - Created a statistical model to predict car sale prices across multiple countries, from data preparation to API deployment, providing valuable pricing insights for Carro's market.
- Directed a Computer Vision team, expertly managing projects and personnel to drive innovation and achieve technical milestones.

Huawei Cloud APAC **Feb 2020 - Sept 2021**
Cloud and AI Solution Architect **Yangon, Myanmar**

- Engineered and deployed tailored AI/ML solutions addressing specific business needs.
- Managed end-to-end machine learning lifecycle, from data preparation to model training and deployment.
- Led the development of AI diagnostics for Covid-19 in Asia-Pacific, significantly aiding healthcare professionals.
- Took charge of the global implementation of OCR, eKYC, and facial recognition technologies, enhancing identity verification processes.

Codigo **June 2018 - Oct 2019**
Machine Learning Researcher **Yangon, Myanmar**

- Developed a comprehensive machine learning pipeline for a Face Anti-Spoofing system, encompassing all stages from data collection to performance evaluation.
- Contributed to the publication of a collaborative research paper, highlighting key findings and methodologies.
- Achieved outstanding model performance with losses of 0.102 on the NUAA dataset, 0.14 on a custom-collected dataset, and 0.2 on the Replay-Attack dataset, demonstrating the system's robustness against various spoofing attacks.

EDUCATION

Master of Computer Science **2018-2019**
Majors: Software Engineering, Research in AI
University of Information Technology, Yangon
Publication - P. P. P. Linn and E. C. Htoon, "Face Anti-spoofing using Eyes Movement and CNN-based Liveness Detection," 2019 International Conference on Advanced Information Technologies (ICAIT), Yangon, Myanmar, 2019, pp. 149-154, doi: 10.1109/AITC.2019.8921091.

Bachelor of Computer Science **2013-2017**
Majors: Software Engineering
University of Information Technology, Yangon

CERTIFICATIONS

AWS Certified Machine Learning – Specialty

PERSONAL RESEARCH

Ongoing research - Continual Learning
Motivation - To address the challenges of neural networks in continual learning settings and to prevent the catastrophic forgetting with a specific interest in balancing stability and plasticity.
Team - Collaboration with a Ph.D. researcher from Nanyang Technological University, Singapore