Arief Koesdwiady

Linkedin: https://www.linkedin.com/in/ariefbarkahkoesdwiady/
Website: https://arief.ca
Github: https://github.com/abkoesdw

Experience

Lead Data Scientist
Ontario, Canada
General Motors
Mar 2018 - Now

- Develop and apply machine learning algorithms and pipelines to various projects involving enterprise and vehicle data (NLP, Computer Vision, time series)
- Deployed multiple NLP-based solutions for the global quality team with total impact > $100M/year
- Partnered with the Customer Care team to build a Customer Churn Prediction engine using customer-specific time-series data. This engine improves the marketing ROI while reducing the cost
- Piloted a Duplicate Bug Report detection app for the Infotainment Dev team
- Built Front/Backend Web applications to serve our analytics solutions using Dash, Flask, Docker
- Developed and maintained CI/CD pipelines on Azure DevOps
- Established best practice, coached the team throughout the projects, and maintained documentations

Previous positions: *Senior Data Scientist* (Sep 2018 - Sep 2020), *Data Scientist* (Mar 2018 - Sep 2018)

Machine Learning Engineer
Ontario, Canada
Cognitech
Oct 2016 - Jan 2018

- Implemented and deployed Deep Neural Nets algorithms for multi-keywords speech recognition on an embedded platform
- Developed an anomaly detection model for industrial time-series data

Education

Ph.D, Computer Engineering
Ontario, Canada
University of Waterloo (UW)
Jan 2014 - May 2018

M.Sc, Control Engineering
Dhahran, KSA
King Fahd University of Petroleum and Minerals (KFUPM)
Aug 2010 - Jun 2013

B.Eng, Physics Engineering
Bandung, Indonesia
Institut Teknologi Bandung (ITB)
Aug 2004 - Jul 2008

Skills

Python: Pandas, TensorFlow, PyTorch, Keras, Scikit-Learn, Dash, Dask, PySpark
Machine Learning: Natural Language Processing, Computer Vision, Time-Series, Statistical Analysis
Tools: SQL, Docker, bash, Azure DevOps, Machine Learning Pipeline on AWS

Awards

- IEEE Vehicular Technology Society 2021 Best Land Transportation Paper Award
- Faculty of Engineering Awards, UW, 2016
- Graduate Research Studentship, UW, 2014 - 2018
- International Doctoral Student Award, UW, 2014 - 2018
- Full Graduate Scholarship, KFUPM, 2010 - 2013

Publications

- Methods to Improve Multi-Step Time Series Prediction. IJCNN 2018.
- End-to-End Deep Learning for Driver Distraction Recognition. ICIAR 2017.
- Big-Data-Generated Traffic Flow Prediction using Deep Learning and Dempster-Shafer Theory. IJCNN 2016.
- Driver Inattention Detection System: A PSO-based Multi-view Classification Approach. IEEE-ITS 2016.

Complete list of publications: Google Scholar