Jerrod Pelley

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Education

Georgia Institute of Technology, 4.0 GPA — Atlanta, GA
Master of Science in Computer Science — *Sep. 2020 – Present*

Arizona State University — Tempe, AZ
Bachelor of Science in Electrical Engineering — *Jan. 2015 – Dec. 2020*

Projects

Vehicle Make and Model Classifier | *Pytorch, Imbalanced Learn, Matplotlib, NumPy, Pandas*
github.com/Pells31/Vehicle-Make-and-Model-Recognition

- Vehicle make, model, and year classifier using CNNs and transfer learning
- Fine-grained image classification context
- Unified multiple publicly available datasets, and utilized data augmentation, to ensure adequate training samples
- Fine-tuned pre-trained ResNet model
- Imbalanced datasets, data cleaning, data pre-processing, data augmentation, CNNs, PyTorch, Transfer Learning, Stratified Sampling

Image Captioning | *Pytorch, Torchvision, Scikit-Learn, Pandas, Pillow, Matplotlib*
github.com/Pells31/Image-Captioning

- Evaluated the performance of three increasingly capable sequence to sequence models for the task of image caption generation
- BLEU scores, seq2seq, pre-trained model, Beam search, Transformers, Attention

Supervised Learning Survey | *Python, Scikit-Learn, Matplotlib, NumPy, Pandas*

- Analyzed performance of various Supervised Learning Algorithms on multiple datasets using ML best practices (Cross-validation, Train/Test split)
- Hyper-parameter tuning via visualizations and grid search
- Noted performance differences in relation to time, scalability, accuracy, convergence, and dataset properties
- Decision Trees, Boosting, Neural Networks, SVM, KNN

Classification Trading Strategy | *Python, Pandas, NumPy, SciPy*

- Implemented a Random Forest Classification Learner (from scratch) for hypothetical stock market trading
- Compared performance of Learner to manual, rules-based strategy

Experience

Technical Sales Account Manager — April 2014 – Jan. 2021
Kohltech Windows & Entrance Systems — *Edmonton, AB*

- Residential and Light Commercial Windows and Doors
  - Managed upwards of twenty dealer accounts (B2B setting) with a track record of success
- Implemented open source Mediawiki software for internal company communication
  - LAMP Stack
  - Employee training

Technical Skills

Machine Learning: Classification, Regression, Clustering, Dimensionality Reduction, EDA, Modeling, Deep Neural Networks, CNNs, RNNs, Transformers
Data Science: Cleaning, Manipulation, Scraping, Data Visualization, Big Data
Languages: Python, C, JavaScript, D3.js
DevOps: Docker, Kubernetes
Data Engineering: Apache Spark, PySpark, SQL, GCP (Google Cloud Platform)
Developer Tools: Git, OpenRefine, Tableau, VS Code, Visual Studio, PyCharm, Linux, Windows
Libraries: Pytorch, Pandas, NumPy, Matplotlib, Scikit-Learn, Flask, Imbalanced-Learn, Pillow