Michal Lyskawinski

Email: michal@lyskawinski.com

Website: lyskawinski.com

Programming Languages: Python, JavaScript, CUDA, C/C++

Github: github.com/michalos88

Education

Stevens Institute of Technology

MS in Computer Science, Concentrating on Artificial Intelligence, GPA: 3.92   May 2019

BE in Mechanical Engineering, GPA: 3.60   May 2017

Experience

Homevest - Machine Learning Engineer   **February 2019 - September 2019**

- Increased rent yield prediction accuracy by 14% by debugging the regression machine learning model
  (Python, Scikit-Learn, Pandas, NumPy)
- Reduced training time of deep learning models by 92% by improving hyper-parameter
  optimization (Python, Tensorflow, Keras, Pandas, NumPy, HyperOpt - Tree Parzen Estimator)

Stevens Institute of Technology (Project) - GPU-Accelerated Randomized SVD   **January 2019 - May 2019**

- Lowered run-time of SVD computation 120x (compared to CPU) by exploiting parallelism through efficient
  GPU programming and implementing methods from the most recent research papers
  (CUDA, C, Amazon Web Services)

Stevens Institute of Technology - Graduate Research Assistant   **July 2018 - February 2019**

- Implemented a novel reinforcement learning model improving agent's safety during exploration by 27%
  (Python, Tensorflow, PyTorch, Dopamine)
- Reduced training iteration cycle 30x by setting up reinforcement learning models to be trained on cloud
  (Python, Tensorflow, PyTorch, Dopamine, OpenAI Gym, Google Cloud Platform)

Woofy - Data Scientist (Part-time, First Employee)   **October 2017 - February 2019**

- Developed a natural language processing app detecting duplicated content to prevent spambot activity
  (Python, Scikit-Learn, NLTK, Flask, MongoDB)
- Built a suite of machine learning REST APIs to automate social media content creation process
  (Python, Flask, MongoDB, Google Cloud ML APIs)

Awards

- Won Silver Medal (Top 5%) in Lyft 3D Object Detection for Autonomous Vehicles Kaggle Competition
  trough improving state of the art model accuracy by 30% by combining features of other models
  (Python, PyTorch, Numba, Scipy, OpenCV, Fire, Ray)

- Won first place out of 17 teams in the 2018 SVC HealthTech Hackathon at Stevens Institute of Technology
  by working with 4 colleagues to develop a web app empowering therapists with machine learning tools
  (Python, JavaScript, HTML/CSS, Flask, MongoDB, Microsoft Azure APIs)

Publications

J. Martin, **M. Lyskawinski**, X. Li, B. Englot, "Stochastically Dominant Distributional Reinforcement Learning",
2019 NeurIPS Workshop on Safety and Robust Decision Making (ArXiv 1905.07318).