

# Michal Lyskawinski

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

## Education

### **Stevens Institute of Technology**

MS in Computer Science, Concentrating in Artificial Intelligence, GPA: 3.92

May 2019

BE in Mechanical Engineering, GPA: 3.60

May 2017

## Experience

### **Homevest - Data Science Intern**

**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 27th place out of 547 teams (Top 5%) in Lyft 3D Object Detection for Autonomous Vehicles Kaggle Competition by implementing and improving state of art research papers (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 ).