KAIWEN WANG

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA Expected May 2020

- Bachelor of Science in Computer Science with an additional major in Math
- Relevant Coursework: Machine Learning[G], Algorithms and Data Structures[G], Distributed Systems[G], Asymptotic Convex Geometry[G], Real Analysis, Probability, Graph Theory, Combinatorics
- Cumulative GPA: 4.00/4.00 G - graduate course

SKILLS

Programming Languages	Python, C/C++, JavaScript, Go, Standard ML, Java, MATLAB
Software and Libraries	Tensorflow/Keras, PySpark, CUDA, NodeJS, D3, Git, LaTeX
Spoken Languages	English (Native), 中文（普通话）(Native), Français (Fluent)

EXPERIENCES

Research Assistant - Machine Learning, Prof. Nina Balcan Dec 2018-Present
Machine Learning Department, Carnegie Mellon University, Pittsburgh, PA

- Performed experiments on Differentially Private TopDown Learning of Decision Trees.
- Implemented for both single machine and multi-node distributed learning algorithms in C++.
- Created and verified new distributed learning algorithm that improves accuracy by 15% on MNIST.

Distributed Systems Teaching Assistant Jan 2019 - Present
Computer Science Department, Carnegie Mellon University, Pittsburgh, PA

- Teaching assistant for 15-440/640 under Prof. Mahadev Satyanarayanan, where I created and led recitations, handled Piazza, held weekly office hours, created and graded homeworks and exams.

Research Intern - Machine Learning May 2018 - Aug 2018
DataVisor Inc., Mountain View, CA

- Implemented an automated quality monitoring system for core unsupervised machine learning (UML).
- Deployed the quality monitoring project as a Web app written in NodeJS using Express and D3.

Research Assistant - Computational Biology, Prof. Min Xu January 2017 - Aug 2018
Computational Biology Department, Carnegie Mellon University, Pittsburgh, PA

- Developed a novel Monte Carlo method for statistical assessment of CECT template matching.
- First-authored paper at CV conference BMVC 2018 (acceptance rate 29.9%). See on my website.

PROJECTS

Classifying Blazars and Cataclysmic Variables (CVs) May 2018

- Using PCA and CNNs, achieved state-of-the-art accuracy of 90% for classifying irregularly sampled time-series of astral light magnitude, with a severely biased and limited dataset.

Autonomous Mobile Robot (Mobot) Apr 2018

- Implemented automated guidance heuristics for an autonomous Mobot capable of outdoors navigation.
- First place winner in the 24$^{\text{th}}$ annual CMU Mobot Race with best time in past six years.