Jin Li

Machine Learning Engineer

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EDUCATION

B.S. Computer Science and Math

University of Chicago

10/2018 – 06/2022 *Major GPA: 3.75*

- Computer Architecture, Parallel Computing, Theory of Algorithms, Complexity Theory

SKILLS

Python | TensorFlow | Scikit-Learn | Numpy | Pandas | Pytorch | C | R | Git | AWS | GCP

WORK EXPERIENCE

Machine Learning Engineer

University of Chicago Medicine

02/2019 – Present *Chicago*

- Improved the World Health Organization's vaccine targets for the Influenza virus by up to 81% by designing a novel machine learning framework
- Reduce computation time for a bottleneck function by a factor of 37,200 by refactoring legacy code and parallelizing functions, saving months of computation time
- Improved cardiac arrest prediction from 0.71 AUC to 0.93 AUC by improving feature engineering and tuning deep neural networks
- Reduced classification error rates of HIV survivability by 18% while reducing parameters by a third by designing a novel type of neural network
- Helped write three research papers that are about to be published, one of which I was the lead author

Deep Learning Engineer

Toyota Technological Institute at Chicago

08/2019 – Present *Chicago*

- Single-handedly rewrote and refactored 57,000 lines of deep learning legacy code to use TensorFlow 2.0 and Python 3
- Improved performance of protein folding by 3% by reading hundreds of research papers and trying out different neural architectures
- Saved months of training time by decreasing training time by over 45% and GPU memory usage by 50% through optimizing bottleneck functions and inefficient code
- Ensured correctness of code by writing over 1,500 test cases and assertions and rewriting old documentations

Deep Learning Intern

ShanghaiTech University

06/2019 – 08/2019 *Shanghai*

- Designed and implemented a novel deep learning algorithm that improved protein folding by 5% and decreased training time by 56%
- Sped up protein structure prediction by seven orders of magnitude faster than traditional folding methods by using my algorithm
- Solo-authored an 11 page research paper that was cited by researchers at Google and DeepMind
- Open sourced my code and collaborated with graduate researchers who used my algorithm to predict and analyze proteins