Jin Huang (Steven)

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Ann Arbor, MI

EDUCATION

University of Michigan, Ann Arbor Aug 2022 - Jun 2024
Bachelor of Science in Computer Science Ann Arbor
GPA: 3.93/4.0

Courseworks: (Graduate level) Information Theory, Machine Learning, Continuous Optimization Methods, Network Theory

(Undergrad level) Computer Vision, Human-Centered Software Design, Data Structures and Algorithms, Intro to Computer Organization, Intro to Operating System, Intro to Autonomous Robotics, Foundations of Computer Science

Shanghai Jiao Tong University Sep 2020 - Jun 2024
Bachelor of Science in Electronic and Computer Engineering (Dual Degree Program with University of Michigan) Shanghai
GPA: 3.78/4.0 (top 10%)

Courseworks: Intro to Artificial Intelligence, Linear Algebra, Probabilistic Methods in Engineering

RESEARCH EXPERIENCE

Foreseer research group, School of Information, University of Michigan May 2022 - Present
Research Intern Ann Arbor

- Built a user-friendly platform to minimize the effort of contributing and maintaining a dataset, increasing the usability of the contributed dataset, as well as encouraging better credits to different contributors of the dataset.
- Conducted detailed benchmarking and hyperparameter tuning on 20+ datasets with 10+ models, contributing for further investigation into the quality of homogeneous and heterogeneous datasets.
- Pulished a paper: "Graph Learning Indexer: A Contributor-Friendly Platform for Better Curation of Graph Learning Benchmarks" as **oral** presentation in Learning on Graphs Conference (LoG 2022).

John Hopcroft Center for Computer Science, Shanghai Jiao Tong University Feb 2022 - Jan 2023
Shanghai
Research Intern

- Developed two game theory concepts: Shapley value and Harsanyi dividend into the field of Artificial Intelligence, inventing a new way of computing Shapley value and Harsanyi dividend without backpropagation.
- Designed the implemented a new type of neural network: Harsanyi network. Analyzed the computation for Harsanyi dividend as well as carrying out experiments on dataset Mnist and Cifar-10. The accuracy of Harsanyi network is 90%+.
- Published a paper at International Conference on Machine Learning (ICML 2023).

WORK EXPERIENCE

Intel Asia-Pacific Research & Development Ltd Dec 2021 - Mar 2022
Deep Learning Software Intern Shanghai

- Participated in the building of BigDL, a large-scale, end-to-end AI application for processing distributed big data, which seamlessly scales data analytics and AI applications from laptop to cloud.
- Maintained an open source project focusing on scalable time series analysis, which has 4k+ stars on github. The model is used in detecting fraud in transactions.
- Developed a fraud detection algorithm on cash flow based on Generative Adversarial Network.

SKILLS, HONORS & OTHERS

- **Computer languages:** Python, C++, C, Matlab, Latex, Html, Bash, Verilog, R, Javascript
- **Tools:** Git, Linux, PyTorch, TensorFlow, Scikit-Learn, Jupyter notebook, Docker, Prompting engineering
- **Honors:** First Prize in China National Olympiad in Informatics in Provinces (NOIP 2018)

PUBLICATION

Chen, Lu, Siyu Lou, Keyan Zhang, **Jin Huang**, and Quanshi Zhang. "HarsanyiNet: Computing Accurate Shapley Values in a Single Forward Propagation." arXiv preprint arXiv:2304.01811(2023).

Ma, Jiaqi, Xingjian Zhang, Hezheng Fan, **Jin Huang**, Tianyue Li, Ting Wei Li, Yiwen Tu, Chenshu Zhu, and Qiaozhu Mei. "Graph Learning Indexer: A Contributor-Friendly and Metadata-Rich Platform for Graph Learning Benchmarks." *arXiv preprint arXiv:2212.04537* (2022).