Education

University of Michigan Ann Arbor, MI

Master of Science in Computer Science Sep 2015 - Aug 2018 GPA: 3.87

Peking University Beijing, China

Sep 2011 – Jun 2015 Bachelor of Science in Physics GPA: 3.73

Skills

Programming Languages: Python, Java, C/C++, Bash, SQL, PHP

Frameworks: PyTorch, TensorFlow, Keras, Amazon Web Services (AWS), Google Cloud Platform

Experience

Data Scientist II, LivePerson

Nov 2020 – present

- Multilingual Text Classification: Built state-of-the-art deep learning systems that understand human intents in multiple languages. Enabled product applications beyond English
- Model Training Optimization: Leveraged advanced training and optimization techniques to enhance machine learning model performance. Increased accuracy by 3% across multiple conversation datasets

Software Development Engineer, Amazon

Apr 2020 - Nov 2020

- Machine Learning Workflow: Developed applications to orchestrate computing resources for model training and releasing workflow. Achieved smooth user experience while maintaining high data security
- Serverless Application: Leveraged AWS serverless to achieve agile development. Applied AWS Lambda for computing, with REST API as input point, SQS as connection, and S3, DynamoDB as data storage

Natural Language Understanding (NLU) Scientist, LivePerson

Nov 2018 – Apr 2020

- Text Classification: Created deep learning NLU library for intent detection and text classification. Achieved fast inference speed by searching among model architectures. Increased accuracy by 5%
- Anomaly Detection: Improved anomaly detection algorithm to identify out-of-topic content. Replaced former algorithm in intent classification and increased accuracy by 2\%
- Automation: Automated model training workflow and model hyperparameter searching processes. Achieved 4x speedup in training by optimizing hardware usage

Vision and Learning Lab Research Assistant, University of Michigan

Summers 2017 & 2018

- Question Answering: Designed spatial-aware deep learning architecture for question answering. Created datasets for spatial-relation understanding. Improved 6% accuracy than former state-of-the-art model
- Math Theorem Proving: Proposed siamese neural network to assist math theorem proving. Outperformed former state-of-the-art model by 7% accuracy on premise selection dataset

## $\mathbf{A}\mathbf{wards}$

Gold Medal, Chinese Physics Olympiad (2011): Excelled in both physics theory and experiment competition. Only 51 students awarded in China in year 2011

Gold Medal, Peking University Math Modeling Competition (2013): Established a team of three. Modeled and simulated basketball shooting. Achieved 9% among 82 teams

## **Publications**

Think Visually: Question Answering through Virtual Imagery

Ankit Goyal, Jian Wang, and Jia Deng. Association for Computational Linguistics (ACL), 2018.

Premise Selection for Theorem Proving by Deep Graph Embedding

Mingzhe Wang, Yihe Tang, Jian Wang, and Jia Deng. Neural Information Processing Systems (NIPS), 2017.