JIAN WANG

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Education

University of Michigan — Ann Arbor, MI

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

Peking University — Beijing, China

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

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 deep learning systems that understand human intents in eight languages. Outperformed Watson and DialogFlow by 5% on conversation data
- **Entity Recognition**: Designed entity taxonomy based on customer needs. Leveraged ensemble of entity recognition models to mine data. Trained deep learning models that outperformed SpaCy NER by 13%

Software Development Engineer, Amazon — Apr 2020 – Nov 2020

- **Machine Learning Workflow**: Developed data-secure applications to orchestrate computing resources, for automated machine learning model training and releasing
- **Serverless Application**: Built applications purely on AWS serverless services. 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%
- **Model Training 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

Awards

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): Led 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.*