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

Coursework: Machine Learning, Parallel Computing, Algorithms, Randomness and Computation

Peking University   Beijing, China

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

Coursework: Probability Theory and Statistics, Mathematical Modeling, Theoretical Computer Science

Skills

Programming Languages: Python, C/C++, MATLAB, PHP, SQL

Frameworks: PyTorch, TensorFlow, Keras, AllenNLP, ONNX, Pachyderm, Jinja2, Git, OpenMP, MPI

Natural Languages: English, Chinese

Experience

Natural Language Understanding (NLU) Scientist, LivePerson   Nov 2018 – present

- Proposed and implemented deep learning model for intent detection. Productized my model for all NLU tasks in the company. Increased accuracy by 5% compared to previous algorithm
- Visualized deep learning model's attention to interpret model predictions. Tested model performance against adversarial conditions to ensure robustness
- Designed and implemented deep learning entity tagging model. Outperformed baseline by 13% f1 score
- Introduced metrics for data annotation quality. Added error check steps to data annotation process

Vision and Learning Lab Research Assistant, University of Michigan   Summers 2017 & 2018

- 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
- Proposed siamese neural network to assist math theorem proving. Outperformed former state-of-the-art model by 7% accuracy on premise selection dataset

Projects

Coding-related Chatbot: Built chatbot that answers coding-related questions, by looking up the most relevant answer on Stack Overflow website

Hosting computer vision challenge: Hosted in-class computer vision challenge for over 100 participants. Built website for registration and model evaluation using HTML, PHP, SQL, and Python

Parallel simulation of sticky particles: Simulated sticky particles in parallel with a load-balancing system. Achieved 45x speed up than single-threaded version on server

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): 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.*