Shijia Liu
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Education

Northeastern University, Ph.D. in Computer Science **Boston, MA**
Specialization: Machine Learning, Natural Language Processing *August 2019 - Present*
Courses: Reinforcement Learning and Sequential Decision Making, Advanced Algorithms

Johns Hopkins University, M.S. in Computer Science **Baltimore, MD**
Specialization: Natural Language Processing, Machine Learning *August 2017 - May 2019*
Courses: Natural Language Processing, Linguistic and Sequence Modeling, Machine Translation, Deep Learning, Optimization for Machine Learning, Causal Inference, Probabilistic Graphical Models, Artificial Intelligence, Probabilistic Models in the Visual Cortex

Stanford University, M.S. in Electrical Engineering **Stanford, CA**
Specialization: Optimization, Communication Systems, Information Theory *September 2012 - June 2014*
Courses: Convex Optimization, Statistical Signal Processing, Information Theory, Linear Dynamical Systems, Wireless Communications

UCLA, B.S. in Electrical Engineering (Summa Cum Laude)
UCLA, B.S. in Physics (Summa Cum Laude) **Los Angeles, CA**
Specialization: Signal Processing, Communication Systems *September 2008 - June 2012*
Courses: Digital Signal Processing, Speech and Image Processing, Numerical Computing, Probability, Data Structures and Algorithms, Computer Architecture, General Relativity

Publication

On the Idiosyncrasies of the Mandarin Chinese Classifier System. Shijia Liu, Hongyuan Mei, Adina Williams and Ryan Cotterell. In the *Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2019).* [ACL]

Research Experience

Student Researcher at JHU **Baltimore, MD**
Collaborators: Ryan Cotterell, Hongyuan Mei *May 2018 - May 2019*
– Crawled and collected dataset from Twitter for analyzing the effects of timestamps on the task of labeling event streams on social media
– Performed rigorous statistical analysis to quantify the idiosyncrasies of the Mandarin Chinese classifier system. Work accepted as a short paper for NAACL 2019

Teaching Experience

Course Assistant for Artificial Intelligence at JHU **Baltimore, MD**
Instructor: Dr. Philipp Koehn *Spring 2019*
– Held office hours and graded homework and exams

Course Assistant for Natural Language Processing at JHU **Baltimore, MD**
Instructor: Dr. Jason Eisner *Fall 2018*

- Led recitation sections
- Held office hours, helped students with course materials and homework in person and on Piazza
- Graded homework and exams. Gave feedback and advice on students' assignments

Course Assistant for Intermediate Programming at JHU **Baltimore, MD**
Instructors: Dr. Sara More, Dr. Ben Langmead, Dr. Misha Kazhdan *Fall 2017 - Spring 2018*

- Attended lectures and guided students on in-class programming exercises
- Held office hours and exam review sessions
- Graded homework and exams. Gave feedback and advice on coding styles

Engineering Course Tutor at UCLA **Los Angeles, CA**
Organization: Tau Beta Pi *Spring 2010*

- Voluntarily held weekly office hours to help students in UCLA engineering school with various courses

Homework Reader for Introductory Java at UCLA **Los Angeles, CA**
Instructor: Dr. Ani Nahapetian *Winter 2011-Spring 2011*

- Wrote autograding scripts to grade student assignments. Gave feedback and advice on coding styles

Industry Experience

Financial Software Developer at Bloomberg L.P. **New York, NY**
Electronic Order Routing Group *Oct 2014 - June 2017*

- Designed and developed backend applications for the company's next-generation real-time electronic trading platform
- Over ˜100,000 trading orders from ˜20,000 users flowing through the applications every day
- Developed and maintained FIX trading applications
- Used C++, C and Python in software development. Programmed in multithreading environment

Software Engineer II Intern at Cisco Systems, Inc **San Jose, CA**
Data Center Group *June 2013 - August 2013*

- Developed Python scripts to automatically diagnose and extract critical information from core dump files. This helped accelerate the testing process for the QA team
- Developed Python scripts to automatically generate diagrams of UCS server clusters

Honors and Awards

Tau Beta Pi Member 2010
Champion Team Member, UCLA Microsoft Programming Contest 2009

Skills

- Programming Languages: Python, C++, C, Java, R, Ruby, Matlab, Javascript, Objective-C
- Data Analysis: Matlab, SQL, Excel
- Operating Systems: Linux, Windows
- Web Application Framework: Ruby on Rails
- Deep Learning Framework: PyTorch