

# Ze-Yuan “Zack” Hu

Homepage: <http://zhu45.org/>  
Email: [iamzeyuanhu@utexas.edu](mailto:iamzeyuanhu@utexas.edu)

## EDUCATION

---

### University of Texas

Austin, TX

Sept 2017 - Present

- M.S. in Computer Science. (GPA:  $\sim$ 4.00)
- Coursework: Human Computation, Structured Models in NLP, Machine Learning

### University of Wisconsin

Madison, WI

Sept 2010 - Dec 2014

- B.A. in Computer Science. (GPA: 3.74/4.00)
- B.A. in Economics with Honors. (GPA: 3.85/4.00)
- B.A. in Mathematics. (GPA: 3.81/4.00)
- Recipient of 2013 Honors Summer Sophomore Research Apprenticeship
- Recipient of 2012 Meek Bishop Scholarship in Economics, *top 2 out of 500 economics major students*

## WORK EXPERIENCE

---

### Software Engineer

IBM

August 2015 – August 2017

DB2 LUW federation team

- Construct Hive & Impala wrappers to support federation database between traditional RDBMS and Hadoop-based data warehouse solution
- Create automated setup tools that reduce product configuration time by 75%
- Enhance server option optimization tools to reduce federation database performance tuning time by 90 % and enable the capability of tuning the product against Hive, Impala, and Spark
- Resolve over 20 defects, including a severe memory leak issue that impacted a \$1.6 million deal. *Awarded IBM Manager's Choice Award 2016*

### Research Assistant

UW-Madison

May 2013 – April 2014

- Applied Spatial Gaussian Process & Dirichlet Process on fMRI data and improved power of testing on predicting Dementia based upon pixel value of the scan by 5 %

### Research Assistant

UW-Madison

September 2012 – May 2013

- Used Support Vector Machine technique to examine the impact of Feedback on children's learning outcomes
- Examined the statistical correlation between fMRI data and DTI data in measuring the brain activity of children during their learning process

## PROJECT

---

- **Neural Networks for Sentiment Analysis** (2017), feedforward neural network and convolutional neural network for the sentiment analysis
- **Shift-Reduce Parsing** (2017), a shift-reduce parser using both a greedy model and a global model with beam search
- **Sequential CRF for NER** (2017), a system that uses HMM model for POS tagging and CRF model for NER
- **Watson Introspector** (2016), a cognitive tool built in Python on IBM Bluemix for understanding software, answering questions, and interacting with software architecture and data flows in 3D. *Awarded Second Prize in IBM China Development Laboratory Hackathon.*

## LANGUAGES AND TECHNOLOGIES

---

- C++; C; Java; Shell; Python; SQL; MATLAB; R;
- DB2; Eclipse; ClearCase; \*nix; Emacs; Vi; Hadoop; Hive; Impala; Sqoop2;