Ze-Yuan "Zack" Hu

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EDUCATION

University of Texas **Austin, TX** **Sept 2017 - Present**

- M.S. in Computer Science. (GPA: 4.00/4.00)
- 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

- **Identifier Inference through Neural Network** (2017), build N-gram and Neural Network language models to study the *Identifier naming convention* problem
- **Exploring Stereotypes and Biased Data with the Crowd** (2017), use the crowdsourcing as a way to detect the bias in the dataset for machine learning tasks
- **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

LANGUAGES AND TECHNOLOGIES

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