

Zeyuan Hu

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EDUCATION

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| University of Texas | Austin, TX | Sept 2017 – May 2019 |
| <ul style="list-style-type: none">• M.S. in Computer Science. (GPA: 3.87/4.00) | | |
| University of Wisconsin | Madison, WI | Sept 2010 – Dec 2014 |
| <ul style="list-style-type: none">• 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) | | |

WORK EXPERIENCE

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| Software Engineer Internship | Schlumberger | May 2018 – August 2018 |
| HPC infrastructure team | | |
| <ul style="list-style-type: none">• Implemented a monitoring component of the in-house High-Performance Computing (HPC) engine in <u>C++</u> to provide the fault tolerance and handle the “straggler” problem• Employed SGD algorithm to dynamically learn the best timing for backup executions of the in-progress tasks based on the computation task characteristics• Built a C++ code generator that automatically generates the application layer code based on the engine API | | |
| Software Engineer | IBM | August 2015 – August 2017 |
| Db2 LUW federation team | | |
| <ul style="list-style-type: none">• Constructed <u>Hive</u> and <u>Impala</u> wrappers with <u>C++</u> and <u>Java</u> to support federation database between traditional RDBMS and Hadoop-based data warehouse solution• Created automated setup tools with <u>Perl</u> and <u>Shell</u> that reduce product configuration time by 75%• Enhanced server option optimization tools using <u>C</u> to reduce federation database performance tuning time by 90 % and enable the capability of tuning the product against Hive, Impala, and Spark• Resolved over 20 defects, including a severe memory leak issue that impacted a \$1.6 million deal. | | |

PUBLICATION

- Jialin Wu, **Zeyuan Hu**, Raymond J. Mooney. “Joint Image Captioning and Question Answering” In *VQA Challenge and Visual Dialog Workshop at the 31st IEEE Conference on Computer Vision and Pattern Recognition* (CVPR2018)

SELECTED PROJECTS

- **HyperPebblesDB** (2018), a Key-Value store that is part of LevelDB family with focus on reducing write amplification. Written in C++.
- **Distributed Key-Value Store** (2018), built a Distributed Key-Value Store with Python that uses eventually consistency model with two session guarantees: *Read Your Writes* and *Monotonic Reads*.

TEACHING

- EE382V Data Engineering (Fall 2018, UT Austin)
Teaching Assistant
- NEU466M Quantitative Methods in Neuroscience (Spring 2018, UT Austin)
Teaching Assistant
- M408K Differential Calculus (Fall 2017, UT Austin)
Teaching Assistant

SPECIALIZED SKILLS

- **Languages:** C++, C, Python, Rust, Java, Shell, SQL, MATLAB
- **Software:** CMake, Autotools, Docker, Tensorflow, Keras, Git, ClearCase, Hive, Impala, Maven, Hadoop
- **Graduate Coursework:** Machine Learning, Structured Models for NLP, Human Computation & Crowdsourcing, Natural Language Processing, Semantics, Distributed Systems, Operating System, Data Centers

HONORS AND AWARDS

- 2017 IBM Appreciation program for the Practice: Dare to create original ideas, IBM.
- 2016 IBM Manager's Choice Award - Put the Client First, IBM.
- 2016 IBM China Development Laboratory Hackathon - 2nd Place, IBM.
- 2014 Graduation with Distinction, University of Wisconsin.
- 2013 Honors Summer Sophomore Research Apprenticeship, University of Wisconsin.
- 2012 Meek Bishop Scholarship in Economics, University of Wisconsin.
- 2010-2012 Dean's List, University of Wisconsin.

SERVICE AND SOCIETIES

- UTCS Master Admission Committee (Jan 2018 – March 2018), Member
- IBM Diamond & Ring Toastmaster Club (Jun 2016 - Jun 2017), President