

Zeyuan Hu

Homepage: <http://zhu45.org/>
Email: ferrishu3886@gmail.com

EDUCATION

- | | | |
|----------------------------|-------------------|-----------------------------|
| University of Texas | Austin, TX | Sept 2017 – May 2019 |
|----------------------------|-------------------|-----------------------------|
- M.S. in Computer Science. (GPA: 3.87/4.00)
 - Coursework: Data Centers, Distributed Systems, Operating System, Human Computation, Structured Models in NLP, Machine Learning, Natural Language Processing, Semantics
- | | | |
|--------------------------------|--------------------|-----------------------------|
| 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 Internship
HPC infrastructure team | Schlumberger | May 2018 – August 2018 |
|--|---------------------|-------------------------------|
- Implemented a monitoring component of the in-house High-Performance Computing (HPC) engine in C++ 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
Db2 LUW federation team | IBM | August 2015 – August 2017 |
|---|------------|----------------------------------|
- Constructed Hive and Impala wrappers with C++ and Java to support federation database between traditional RDBMS and Hadoop-based data warehouse solution
 - Created automated setup tools with Shell that reduce product configuration time by 75%
 - Enhanced server option optimization tools using C 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. *Awarded IBM Manager’s Choice Award 2016*

SELECTED PROJECTS

- 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)* ¹
- **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*.

LANGUAGES AND TECHNOLOGIES

- **Languages:** C++, C, Python, Rust, Java, Shell, SQL, MATLAB
- **Software:** CMake, Autotools, Docker, Tensorflow, Keras, Git, ClearCase, Hive, Impala, Maven, Hadoop

^{1†}Equal contribution