

# Zack (Zeyuan) Hu

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## EDUCATION

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| <b>University of Wisconsin</b>   | <b>Madison, WI</b> | <b>Sept 2010 - Dec 2014</b> |
| <ul style="list-style-type: none"><li>• B.A. in Computer Science. (GPA: 3.74/4.0)</li><li>• B.A. in Economics with Honors. (GPA: 3.85/4.0)</li><li>• B.A. in Mathematics. (GPA: 3.81/4.0)</li><li>• Recipient of 2013 Honors Summer Sophomore Research Apprenticeship</li><li>• Recipient of 2012 Meek Bishop Scholarship in Economics, <i>top 2 out of 500 economics major students</i></li></ul> |                    |                             |

## WORK EXPERIENCE

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|---|-------------------|----------------------------------|
| <b>Software Engineer</b>  | <b>IBM</b>        | <b>August 2015 – Present</b>     |
| DB2 LUW federation team   |                   |                                  |
| <ul style="list-style-type: none"><li>• Construct Hive &amp; Impala wrappers to support federation database between traditional RDBMS and Hadoop-based data warehouse solution</li><li>• Create automated setup tools that reduce product configuration time by 75%</li><li>• 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</li><li>• Resolve over 20 defects, including a severe memory leak issue that impacted a \$1.6 million deal. <i>Awarded IBM Manager's Choice Award 2016</i></li></ul> |                   |                                  |
| <b>Research Assistant</b>   | <b>UW-Madison</b> | <b>May 2013 – April 2014</b>     |
| <ul style="list-style-type: none"><li>• Applied Spatial Gaussian Process &amp; Dirichlet Process on fMRI data and improved power of testing on predicting Dementia based upon pixel value of the scan by 5 %</li></ul>  |                   |                                  |
| <b>Research Assistant</b>   | <b>UW-Madison</b> | <b>September 2012 – May 2013</b> |
| <ul style="list-style-type: none"><li>• Used Support Vector Machine technique to examine the impact of Feedback on children's learning outcomes</li><li>• Examined the statistical correlation between fMRI data and DTI data in measuring the brain activity of children during their learning process</li><li>• Created a data extraction &amp; formatting toolkit in Python that can finish the processing of over 600 MB experimental data within 10 seconds</li></ul>  |                   |                                  |

## PROJECT

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- **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.*
- **OptiTimal** (2013), an android application that allows user to log their time usage and generate a simple statistical report that characterizes their time management style.
- **Checker** (2012), an AI engine developed in Java for checker game with alpha-beta pruning search algorithm, depth-first iterative deepening method.
- **Malloc** (2011), a memory allocator for the heap of a user-level process in C.

## LANGUAGES AND TECHNOLOGIES

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