# ZHE YU

*Resume*

**CONTACT**

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*I believe the future of AI is not replacing humans with machines, but better support humans with machines. Hence, my carrier goal is creating a "human in the loop" machine learning environment.*

## Research Experience

*Current, from August 2015*

**PhD Scholar**, The RAISE Lab, Department of Computer Science, NCSU.

*Working as a member of RAISE Lab, following the instruction of Dr. Menzies. My primary research is to apply machine learning algorithms to support human retrieve desired information from big data with less effort.*

a) *Developed a method called FASTREAD which reduces the review cost by 90% in sacrifice of 10% recall. FASTREAD outperforms the state-of-the-art methods in litigation and medicine.*

b) *A tool has been developed to implement FASTREAD, which can be found at https://github.com/ai-se/MAR.*

*Current, from August 2015*

**Graduate Research Assistant,** The SeBIG Lab, LexisNexis and NCSU.

*Member of a new lab, called "SeBig" (Software Engineering for Big Data), established as joint research collaboration between LexisNexis and NC State. Working with two other graduate students on validation methods for Big Data applications in large-scale industrial data.*

*March 2014 – August 2014*

**Research Intern**, Department of Computer Science, Shanghai Jiaotong University

*Worked as a research intern under Dr. Yuan. Conducted several experiments on stock index futures data. Established a feature selection scheme of Stock Index Futures with low-rank approximation and sparse representation.*

*February 2011 – March 2014*

**Graduate Research Assistant,** The RCIR Lab, Shanghai Jiaotong University.

*Worked as a research assistant under Dr. Su. My research focuses on the disturbance observer based control on multi-variable plants.*

a) *Established a sufficient condition for the closed-loop robust stability of a disturbance observer-based multi-variable control system.*

b) *Proposed a systematic design procedure of the multi-variable disturbance observer.*

c) *Validated the efficacy of control method through experiments on a quadrotor system.*

*March 2013 – June 2013*

**Research Intern,** The RCIR Lab, Shanghai Jiaotong University.

*Worked with two other graduate students on design and construction of a plug-and-play mobile robot system.*

*July 2010 – September 2010*

**Undergraduate Researcher,** Department of Automation, Shanghai Jiaotong University.

*Collaborated with a research team under Dr. Xing. Worked on the optimization of a humanoid robot construction. Identified the largest push the humanoid robot can recover from through simulations via changing the ratio of lower body to upper body.*

## Education

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|---|---|
| Aug 2015 – Now | **PhD in Computer Science, NC State University.** Current GPA: 4.0. |
| Sep 2011 – Mar 2014 | **M.S. in Control Science and Engineering**, Shanghai Jiaotong University, CHINA. |
| Sep 2007 – Jun 2011. | **Bachelor in Automation, Shanghai Jiaotong University, CHINA.** |

## Technical Skills

**Programming Languages**

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|---|---|
| *Experienced* | Java, Scala |
| *Experienced++* | Python, Matlab, C++, and JS |

## Publications

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|---|---|
| May 2016 | **The BigSE project: lessons learned from validating industrial text mining.** *In Proceedings of the 2nd International Workshop on BIGDSE, pp. 65-71.* |
| Nov 2014 | **Disturbance Observer Based Control for Linear Multi-variable Systems with Uncertainties.** *Acta Automatica Sinica, 40(11): 2643-2651, CHINA* |

## Working Experience

*May 2016 – Aug 2016*

**Software Engineer, LexisNexis, Raleigh**

a) *Created a sandbox for prototyping new DiscoveryIQ features. (Python + JS + ElasticSearch)*

b) *Developed new feature, which is called "Open the blackbox", of DiscoveryIQ.*

c) *Incorporate new feature into current DiscoveryIQ product. (Scala + Spark).*

*August 2014 – July 2015*

**Engineer, NEW BRP, Beijing**.

*New BRP is a company design and produce control devices for motor drive systems. Finished the whole process of producing a motor control center, including assembling, wiring and debugging.*