



# Yigong Hu, Ph.D.

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## Education

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- 2017 – Present     **Johns Hopkins University**  
PhD student in Computer Science Department  
Advisor: Prof. Ryan Huang
- 2013 – 2017     **Huazhong University of Science and Technology**  
B.E. in Computer Science  
Rank 1/258, Graduate with Honors

## Work Experience




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- May,2019 – Aug.2019     **Software Intern.** Microsoft  
Mentor: Ze Li, Yingnong Dang
- Sept,2017 – Present     **Research Assistant** Johns Hopkins University  
Mentor: Ryan Huang
- Aug,2016 – July,2017     **Research Student** Huazhong University of Science and Technology  
Mentor: Hai Jin, Deqing Zou
- May,2016 – Aug,2016     **Research Student** University of Chicago  
Mentor: Shan Lu

## Research Publications

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### Conference Proceedings

-  Hu, Y., Gongqi, H., & Huang, P. (2020, November). Automated Reasoning and Detection of Specious Configuration in Large Systems with Symbolic Execution. In *Proceedings of the 14th unix symposium on operating systems design and implementation (OSDI'20)*.
-  Hu, Y., Li, Z., Huang, P., Pinnamaneni, S., David, F., Dang, Y., & Chintalapati, M. (2020, February). Scaling Performance Issue Detection and Diagnosis in Cloud Infrastructures. In *Proceedings of the 24th aaii workshop on cloud intelligence: ai/ml for efficient and manageable cloud services (AAAI'20 WORKSHOP)*.
-  Hu, Y., Liu, S., & Huang, P. (2019, April). A Case for Lease-Based, Utilitarian Resource Management on Mobile Devices. In *Proceedings of the 24th international conference on architectural support for programming languages and operating systems (ASPLOS'19)* **Best Paper Award**.

## Honor and Award

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- Apr.2019    ASPLOS 2019 Best Paper Award
- June.2017    Honor Graduated student
- May.2017    Outstanding Undergraduates Thesis Award
- May.2015    Outstanding Undergraduates Exchange Fellowship
- Oct.2014    National scholarship
- Oct.2015    Outstanding student scholarship

## Honor and Award (continued)

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- Oct.2014 Outstanding student scholarship  
Oct.2013 Outstanding Freshman Scholarship

## Involved Project

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- Sept,2018 – Aug 2020 **Automatically detect performance misconfiguration in large system.**
- Advisor: Ryan Huang
  - Using symbolic execution and static analyzer to detect specious configuration in large software
- May,2019 – Aug,2019 **Performance regression detection and diagnosis in Azure cloud.**
- Mentor: Ze Li, Yingnong Dang
  - Design a performance diagnosis tool to find performance regression in cloud system
- Sept,2017- Aug,2018 **A new resource management mechanism for mobile system to mitigate run-time energy misbehavior, published in ASPLOS'19**
- Advisor: Ryan Huang
  - Design a Lease-based mechanism in Android system to mitigate energy waste of mobile application without causing usage disruption
- Sept,2016-May,2017 **Analyzing performance anti-pattern in database-back applications built on Object Relational Mapping framework.**
- Advisor: Hai Jin, Deqin Zou and Shan Lu
  - Classify three types of the common performance anti-patterns on 26 real-world web applications
- Jul.2016-Aug.2016 **Bug study in populate open source distribute system**
- Advisor: Shan Lu
  - Studying the root cause of concurrency bug in distributed system.
  - Identifying how to derive the error symptom from the log

## Skills

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Languages	English, Mandarin Chinese.
Coding	Java, C + + /C, Python, SQL,
Tool and System	LLVM/Clang, Klee, Android Framework, MySQL.
App Dev	Android Programming