

# KYUNGMIN LEE (JASON)

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## EDUCATION

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- University of Michigan**, Ann Arbor, MI 2011 – 2016
- Ph.D Candidate in Computer Science & Engineering  
Advisor: Jason Flinn and Brian Noble
  - M.S. Computer Science & Engineering 2011 – 2012  
GPA: 4.000
- Duke University**, Durham, NC 2005 – 2008, 2010 – 2011
- B.S. in Computer Science  
Minor in Economics
  - Graduated with Magna Cum Laude

## WORK EXPERIENCE

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- Facebook**, New York, NY June 2017 – Present  
*Software Engineer*
- IBM T.J. Watson Research Center**, Yorktown Heights, NY June 2016 – June 2017  
*Research Staff Member*
- Developed a cognitive design management platform to assist IBM designers to retrieve needed design files
  - Contributed in creating novel card-based programming mechanism to automate tasks performed by drones
- Microsoft Research**, Redmond, WA Summer 2013  
*Summer Research Intern, Mentor: David Chu and Alec Wolman*
- Developed a speculation mechanism for cloud-based gaming server (Outatime/Delorean project)
  - Attained low-latency continuous game interactivity over wide-area with speculation for a thin mobile client
- ROK-Defense Communication Command** (Mandatory Military Duty), Seoul, Korea 2008 – 2010  
*Sergeant, Web Application Developer & Database Manager*
- Developed web applications using JSP / Oracle for military officers to use in ROK DoD, JCS, and ROK/US CFC
  - Managed and monitored database systems and network traffic in military intra-net
  - Received the Distinguished Soldier Award for excellence in software development from Brigadier General

## PUBLICATIONS

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- **Kyungmin Lee**, David Chu, Eduardo Cuervo, Johannes Kopf, Yury Degtyarev, Sergey Grizan, Alec Wolman, Jason Flinn. *Outatime: Using Speculation to Enable Low-Latency Continuous Interaction for Mobile Cloud Gaming*. Proceedings of the 13th International Conference on Mobile Systems, Applications, and Services (**MobiSys**), Florence, Italy, May 2015. **Awarded the best paper award**
- **Kyungmin Lee**, Jason Flinn, and Brian Noble. *The Case for Operating System Management of User Attention*. Proceedings of the 16th International Workshop on Mobile Computing Systems and Applications (**HotMobile**), Santa Fe, NM, February 2015.
- Brett D. Higgins, **Kyungmin Lee**, Jason Flinn, T.J. Giuli, Brian Noble, and Christopher Peplin. *The future is cloudy: Reflecting prediction error in mobile applications*. Proceedings of the 6th International Conference on Mobile Computing, Applications, and Services (**MobiCASE**), Austin, TX, November 2014.
- **Kyungmin Lee**, David Chu, Eduardo Cuervo, Johannes Kopf, Sergey Grizan, Alec Wolman, Jason Flinn. *DeLorean: using speculation to enable low-latency continuous interaction for mobile cloud gaming*. MSR Technical Report, August 2014.
- **Kyungmin Lee**, Jason Flinn, T.J. Giuli, Brian Noble, and Christopher Peplin. *AMC: Verifying User Interface Properties for Vehicular Applications*. Proceedings of the 11th International Conference on Mobile Systems, Applications, and Services (**MobiSys**), Taipei, Taiwan, June 2013. **Nominated for the best paper award**

- Peter Gilbert, Jaeyeon Jung, **Kyungmin Lee**, Henry Qin, Daniel Sharkey, Anmol Sheth, and Landon P. Cox. *YouProve: Authenticity and Fidelity in Mobile Sensing*. Proceedings of the 9th ACM Conference on Embedded Networked Sensor Systems (**SenSys**), Seattle, WA, November 2011.
- Susan H. Rodger, Eric Wiebe, **Kyung Min Lee**, Chris Morgan, Kareem Omar, and Jonathan Su. *Increasing Engagement in Automata Theory with JFLAP*. Proceedings of the 40th SIGCSE Technical Symposium on Computer Science Education, Chattanooga, TN, March 2009.

## POSTER / DEMO

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- **Kyungmin Lee**, David Chu, Eduardo Cuervo, Johannes Kopf, Alec Wolman, Jason Flinn. *Demo: DeLorean: using speculation to enable low-latency continuous interaction for mobile cloud gaming*. Demo at the 12th International Conference on Mobile Systems, Applications, and Services (**MobiSys**), Bretton Woods, NH, June 2014. **Awarded best demo**
- **Kyungmin Lee**, Jason Flinn, T.J. Giuli, Brian Noble, Christopher Peplin. *Model Checking Mobile User Interface Constraints*. Poster at the 10th USENIX Symposium on Operating Systems Design and Implementation (**OSDI**), Hollywood, CA, October 2012.

## PRESENTATIONS

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- *Outatime: Using Speculation to Enable Low-Latency Continuous Interaction for Mobile Cloud Gaming*. (**MobiSys 2015**)
- *The Case for Operating System Management of User Attention*. (**HotMobile 2015**)
- *The future is cloudy: Reflecting prediction error in mobile applications*. (**MobiCASE 2014**)
- *AMC: Verifying User Interface Properties for Vehicular Applications*. (**MobiSys 2013**)

## PROFESSIONAL SERVICE

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**ACM MobiCom 2017**, Web chair  
**ACM MobiSys 2017**, Treasurer  
**ACM MoReal 2017**, Technical program committee member  
**NetGames 2017**, Technical program committee member  
**ACM CHI 2017**, Reviewer  
**ACM MobiSys 2016: PHD Forum**, Technical program committee member  
**ACM UbiComp 2016**, Reviewer  
**IEEE Transactions on Mobile Computing**, Reviewed multiple journal manuscripts  
**ACM MobiSys 2015: PHD Forum**, Technical program committee member

## PRESS

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### 2014 – DeLorean (Outatime) in the news

- Featured in TechCrunch, The Verge, Engadget, Slashdot, PCMag, Gamespot, The Register, PCWorld, Gizmodo, SlashGear
- Based on MSR Technical Report publication

## TEACHING EXPERIENCE

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**User Interface Development Class**, University of Michigan Spring 2015  
*Graduate Student Instructor*

- Ran weekly discussion section to teach supplemental material and help students prepare for exams
- Held weekly office hours to help students with homework assignments and class projects

**Undergraduate Operating Systems Class**, Duke University Spring 2008, Fall 2010, Spring 2011  
*Undergraduate Teaching Assistant*

- Held weekly office hours to help students with class projects and understanding class materials

**Undergraduate Programming Design and Analysis Class**, Duke University Fall 2006 – Fall 2007  
*Undergraduate Teaching Assistant*

- Held weekly office hours to help students in doing their assignments
- Graded weekly assignments and class projects