

# Daejun Park

Ph.D. Student

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## Research Interests

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- ▶ *Language-parametric* formal methods, compiler verification, and formal security.

## Education

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| Ph.D., Computer Science, University of Illinois at Urbana-Champaign      | 2013 – present |
| M.S., Computer Science and Engineering, Seoul National University, Korea | 2006 – 2008    |
| B.S., Computer Science and Engineering, Seoul National University, Korea | 2001 – 2006    |

## Publications

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- [1] **KEVM: A Complete Formal Semantics of the Ethereum Virtual Machine.**  
Everett Hildenbrandt, Manasvi Saxena, Nishant Rodrigues, Xiaoran Zhu, Philip Daian, Dwight Guth, *Daejun Park*, Yi Zhang, Brandon Moore and Grigore Rosu. *Proceedings of the 2018 IEEE Computer Security Foundations Symposium (CSF'18)*, 2018. To appear.
- [2] **Invariant Synthesis for Incomplete Verification Engines.**  
Daniel Neider, P. Madhusudan, Pranav Garg, Shambwaditya Saha, and *Daejun Park*. *Proceedings of the 24th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'18)*, 2018. To appear.
- [3] **Semantics-Based Program Verifiers for All Languages.**  
Andrei Stefanescu, *Daejun Park*, Shijiao Yuwen, Yilong Li, and Grigore Rosu. *Proceedings of the 2016 ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA'16)*, 2016. **Distinguished Paper Award**
- [4] **KJS: A Complete Formal Semantics of JavaScript.**  
*Daejun Park*, Andrei Stefanescu, and Grigore Rosu. *Proceedings of the 36th ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI'15)*, 2015.
- [5] **Global Sparse Analysis Framework.**  
Hakjoo Oh, Kihong Heo, Wonchan Lee, Woosuk Lee, *Daejun Park*, Jeehoon Kang, and Kwangkeun Yi. *ACM Transactions on Programming Languages and Systems (TOPLAS)*, Vol.36, No.3, Sep 2014.

## Work Experience

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Research Intern, Microsoft Research, WA Summer 2017

- ▶ Designed a novel *verifiable computing* technique for deep neural network training.

Founding Member & Technical Lead, Sparrow (*acquired by Fasoo in 2010*), Korea 2008 – 2012

- ▶ Designed and implemented *a static program analysis tool* detecting memory safety errors and security vulnerabilities in embedded-system software.

## Honors & Awards

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Distinguished Paper Award at OOPSLA'16 2016

Korean Government Scholarship 2013–2015

Honors Scholarship, Seoul National University 2003–2004

Bronze Medal in National Mathematics Competition 2000

## References

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**Kwangkeun Yi**

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