

Daejun Park

Ph.D. Student

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Research Interests

- ▶ Program verification: invariant synthesis, translation validation (for compiler).
- ▶ Security: verifiable computing (for machine learning and cryptocurrency).

Education

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

- [1] **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.
- [2] **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**
- [3] **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.
- [4] **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

Research Intern , Microsoft Research, WA	Summer 2017
▶ Designed a novel <i>verifiable computing</i> technique for deep neural network training.	
Founding Member & Technical Lead , Sparrow (<i>acquired by Fasoo in 2010</i>), Korea	2008 – 2012
▶ Designed and implemented a <i>static program analysis tool</i> detecting memory safety errors and security vulnerabilities in embedded-system software.	

Honors & Awards

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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