MINSEOK JEON

PERSONAL INFORMATION

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RESEARCH INTERESTS

I am interested in programming languages with applications to software engineering and machine learning:

- **Static analysis:** static program analysis for automatically detecting software bugs and vulnerabilities.
- **Software testing:** automatically generating effective test inputs for detecting software bugs.
- **Machine learning:** machine learning for accurate, interpretable, and explainable AI.

EDUCATIONAL BACKGROUND

March 2017 - February 2023 Integrated M.S. & Ph.D. in Computer Science and Engineering. Korea University.

- Advisor: Hakjoo Oh

March 2011 - February 2017 B.S. in Computer Science and Engineering. Korea University.

EMPLOYMENT HISTORY

March 2023 - Present Postdoctoral Researcher. Korea University.

PUBLICATIONS

Published papers on programming languages in premier conferences (POPL 2022, OOPSLA 2017, OOPSLA 2018, and OOPSLA 2020) and journal (TOPLAS 2019).

April 2023 Jinkook Kim, **Minseok Jeon**, Sejeong Jang, and Hakjoo Oh.
Automating Endurance Test for Flash-based Storage Devices in Samsung Electronics.
ICST 2023: IEEE International Conference on Software Testing, Verification and Validation (Industry Track).

January 2022 **Minseok Jeon** and Hakjoo Oh.
Return of CFA: Call-Site Sensitivity Can Be Superior to Object Sensitivity Even for Object-Oriented Programs.
POPL 2022: The 49th ACM SIGPLAN Symposium on Principles of ProgrammingLanguages.

July 2021 Donghoon Jeon, **Minseok Jeon**, and Hakjoo Oh.
A Practical Algorithm for Learning Disjunctive Abstraction Heuristics in Static Program Analysis.
Information and Software Technology Volume 135.

November 2020 **Minseok Jeon**, Myungho Lee, and Hakjoo Oh.
Learning Graph-based Heuristics for Pointer Analysis without Handcrafting Application-Specific Features.
OOPSLA 2020: ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications.

June 2019 **Minseok Jeon***, Sehun Jeong*, Sungdeok Cha, and Hakjoo Oh (*co-first author).
A Machine-Learning Algorithm with Disjunctive Model for Data-Driven Program Analysis.
TOPLAS: ACM Transactions on Programming Languages and Systems.

November 2018 **Minseok Jeon**, Sehun Jeong, and Hakjoo Oh.
Precise and Scalable Points-to Analysis via Data-Driven Context Tunneling.
OOPSLA 2018: ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications.

October 2017 Sehun Jeong*, **Minseok Jeon***, Sungdeok Cha, and Hakjoo Oh (*co-first author).
Data-Driven Context-Sensitivity for Points-to Analysis.
OOPSLA 2017: ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications.

SERVICE

Program Committee Members

1. OOPSLA 2024: ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications

TALKS

1. Return of CFA: Call-Site Sensitivity Can Be Superior to Object Sensitivity Even for Object- Oriented Programs. STAAR Workshop. Jeju. Feb 11 2022.

2. Return of CFA: Call-Site Sensitivity Can Be Superior to Object Sensitivity Even for Object- Oriented Programs. Paper presentation at POPL 2022. Philadelphia, USA. Jan 19 2022.

3. Learning Graph-based Heuristics for Pointer Analysis without Handcrafting Application- Specific Features. KSC2020.

4. Learning Graph-based Heuristics for Pointer Analysis without Handcrafting Application- Specific Features. Paper presentation at OOPSLA 2020. Online. NOV 20 2020.

5. Precise and Scalable Points-to Analysis via Data-Driven Context Tunneling. Paper presen- tation at OOPSLA 2018. BOSTON, USA. NOV 8 2018.

6. Data-Driven Context-Sensitivity for Points-to Analysis, KCC 2018. JeJu, Korea.

7. Data-Driven Context-Sensitivity for Points-to Analysis, KCSE 2018. Pyeongchang, Korea.