## Curriculum Vitae

### Personal Information

Full Name: Seongmin Lee

Full Curriculum Vitae: https://nimgnoeseel.github.io/resources/cv/cv.pdf

Google Scholar: https://scholar.google.com/citations?user=-YSnc6kAAAAJ&hl=en Personal Website:

https://nimgnoeseel.github.io

# **Education and Employment**

Max Planck Institute for Security and Privacy

Germany

Postdoctoral Researcher, Software Security Research group (Group head: Dr. Marcel Böhme) Sep. 2022 – Present Korea Advanced Institute of Science and Technology Republic of Korea

Doctor of Philosophy, School of Computing (Advisor: Dr. Shin Yoo)

Sep. 2016 – Aug. 2022

Bachelor of Science, School of Computing

Feb. 2012 - Aug. 2016

Bachelor of Science, Department of Mathematical Sciences

### Selected Publications

#### Journal Articles

- Seongmin Lee, David Binkley, Robert Feldt, Nicolas Gold, and Shin Yoo. Observation-based approximate dependency modeling and its use for program slicing. Journal of Systems and Software, page 110988, 2021
- Seongmin Lee, David Binkley, Nicolas Gold, Syed Islam, Jens Krinke, and Shin Yoo. Evaluating lexical approximation of program dependence. Journal of Systems and Software, 160:110459, 2020

### Conference/Technical Reports

- \*Danushka Livanage, \*Seongmin Lee, Chakkrit Tantithamthavorn, and Marcel Böhme. Extrapolating coverage rate in greybox fuzzing. In Proceedings of the 2024 International Conference on Software Engineering, 2024 (\*Co-first authors with equal contribution)
- Seongmin Lee and Marcel Böhme. Statistical reachability analysis. In Proceedings of the 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2023, pages 326–337, New York, NY, USA, 2023. Association for Computing Machinery
- S. Lee, S. Hong, J. Yi, T. Kim, C. Kim, and S. Yoo. Classifying false positive static checker alarms in continuous integration using convolutional neural networks. In 2019 12th IEEE Conference on Software Testing, Validation and Verification (ICST), pages 391–401, 2019
- Seongmin Lee, Dave Binkley, Robert Feldt, Nicolas Gold, and Shin Yoo. Causal program dependence analysis and causal fault localization. Technical Report CS-TR-2021-423, Korea Advanced Institute of Science and Technology, 291 Daehak-ro, Yuseong-gu, Daejeon, Korea 34141, January 2021

### Academic Services

- Program committee: ISSTA'24, ASE'23 / (Artifact Evaluation Track) ECOOP'24, USENIX'24, ICSE'24, ISSTA'23, etc.
- Reviewer: TSE'24, IST'24, TOSEM'22, JSS'21, JSS'20 / (External) FSE'24, ECOOP'24, ICSE'23, ISSTA'23

### Grants and Fellowships

• Title: Statistical Security Analysis for Large, Evolving Software Grant ID: DFG under Germany's Excellence Strategy - EXC 2092 CASA - 390781972 Amount: Salary according to the remuneration group E 14 TV-L (full time), Duration: 2024.01.01 - 2025.12.31

### Awards and honors

- PhD Dissertation Award, School of Computing, KAIST, 2022
  - Title of Dissertation: Statistical Program Dependence Approximation
- 2021 Naver Ph.D. Fellowship Award: Awarded by NAVER Corp. to Ph.D. candidates who have published an outstanding research paper or have excellent publication performance, 2021