Curriculum Vitae

Personal Information

Full Name:

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

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

Seongmin Lee

Personal Website: https://nimgnoeseel.github.io

Education and Employment

Max Planck Institute for Security and Privacy

Postdoctoral Researcher, Software Security Research group (Group head: Dr. Marcel Böhme) Sep. 2022

Korea Advanced Institute of Science and Technology

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

Bachelor of Science, School of Computing

Bachelor of Science, Department of Mathematical Sciences

Germany

Sep. 2022 – Present Republic of Korea

Sep. 2016 - Aug. 2022

Sep. 2010 - Aug. 202.

Feb. $2012 - Aug.\ 2016$

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

- Seongmin Lee, Shreyas Minocha, and Marcel Böhme. Accounting for missing events in statistical information leakage analysis. In Proceedings of the IEEE/ACM 46th International Conference on Software Engineering, ICSE '25, 2025
- *Danushka Liyanage, *Seongmin Lee, Chakkrit Tantithamthavorn, and Marcel Böhme. Extrapolating coverage rate in greybox fuzzing. In *Proceedings of the IEEE/ACM 46th International Conference on Software Engineering*, ICSE '24, New York, NY, USA, 2024. Association for Computing Machinery (*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

*Services before 2023 are omitted.

- Program committee: (Main Track) ASE'24, ISSTA'24, FUZZING'24, SCAM'24, ASE'23 / (Artifact Evaluation) ISSTA'24, ECOOP'24, USENIX Security'24, ICSE'24, ISSTA'23 / (Student Research Competition) FSE'24 / (Tool Demonstration Track) ASE'24
- Reviewer: TOSEM'24, TSE'24, IST'24, ASE'24 / (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, ~ €136,000), Duration: 2024.01.01 - 2025.12.31

Awards and honors

- Distinguished Artifact Reviewer Award, 33rd USENIX Security Symposium, 2024
- 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