

# CURRICULUM VITAE

## Personal Information

Full Name:	Seongmin Lee
Full Curriculum Vitae:	<a href="https://nimgnoeseel.github.io/resources/cv/cv.pdf">https://nimgnoeseel.github.io/resources/cv/cv.pdf</a>
Google Scholar:	<a href="https://scholar.google.com/citations?user=-YSnc6kAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=-YSnc6kAAAAJ&amp;hl=en</a>
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## Education and Employment

Max Planck Institute for Security and Privacy	Germany
<b>Postdoctoral Researcher, Software Security Research group</b> (Group head: Dr. Marcel Böhme)	Sep. 2022 – Present
Korea Advanced Institute of Science and Technology	Republic of Korea
<b>Doctor of Philosophy, School of Computing</b> (Advisor: Dr. Shin Yoo)	Sep. 2016 – Aug. 2022
<b>Bachelor of Science, School of Computing</b>	Feb. 2012 – Aug. 2016
<b>Bachelor of Science, Department of Mathematical Sciences</b>	

## 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 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: ISSTA'24, FUZZING'24, SCAM'24, ASE'23 / (Artifact Evaluation) ISSTA'24, ECOOP'24, USENIX'24, ICSE'24, ISSTA'23 / (Student Research Competition) FSE'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

- 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