# JEEWOONG KIM

Chungbuk National University

1 Chungdae-ro, Seowon-gu, Cheongju, Chungbuk 28644, Republic of Korea

⊠ jeewoong@chungbuk.ac.kr

## **Education and Experience**

Mar 2022 – Present	Ph. D student Computer Science, Chungbuk National University (advisor: Prof. Shin Hong)
	Mar 2022 – Mar 2024, Master of Science in Computer Science and Engineering, Handong Global University (advisor: Prof. Shin Hong)
Sep 2021 – Mar 2022	Research Associate ARISE Lab, Handong Global University (supervised by Prof. Shin Hong)
Aug 2018 – Aug 2021	Master of Science Department of Information and Communication Engineering, Handong Global University (advisor: Prof. Shin Hong) - Thesis title: Extracting Fine-grained Traceability Links Between API Document Comments and JUnit Test Code Lines
Mar 2011 – Aug 2018	Bachelor of Science School of Computer Science & Electrical Engineering, Handong Global University

## Research Experience

- Investigated on a new greybox fuzzing technique for C/C++ programs to improve the accuracy and efficiency of automated debugging processes
- Developed a new technique for extracting traceability link between Javadoc API documents and JUnit Test Code for improving test code quality
- Developed a C++ based deep learning open source framework for readability and extensibility (WICWIU)

### **Publications**

- [1] **J. Kim**, Y. Kang, A. Lee, M. Kim, and S. Hong, Systematically Collecting Cross-project Bug Cases from OSS-Fuzz Test History, *Korean Software Engineering Conference (KCSE)*, Jan 2025
- [2] **J. Kim** and S. Hong, BugOss: A Benchmark of Real-world Regression Bugs for Empirical Investigation of Regression Fuzzing Techniques, *Journal of Systems and Software (JSS)*, Vol. 216, Oct 2024
- [3] **J. Kim** and S. Hong, Poster: BugOss: A Regression Bug Benchmark for Empirical Study of Regression Fuzzing Techniques, *IEEE International Conference on Software Testing, Verification and Validation (ICST)*, Powter Track, Apr 2023
- [4] **J. Kim** and S. Hong, Inferring Fine-grained Traceability Links between Javadoc Comment and JUnit Test Code, the 38th IEEE International Conference on Software Maintenance and Evolution (ICSME), New Ideas and Emerging Results Track (NIER), Oct 2022
- [5] J. Kim, S. Kim, and S. Hong, How Does a Unit-level Test Case for Continuous Fuzzing Evolve: An

- Empirical Study of Code Changes in OSS-Fuzz Projects, *Korean Congress of Computing (KCC)*, Jun 30-Jul 1, 2022
- [6] **J. Kim** and S. Hong, Evaluation of Test Requirement Extraction Techniques for Javadoc Description, *Korean Software Engineering Conference (KCSE)*, Feb 2020 [video]
- [7] C. Park, **J. Kim**, Y. Kee, J. Kim, S. Yoon, E. Choi, and I. Kim, C++ based General-purpose Open Source Deep Learning Framework, WICWIU, *Journal of KIISE*, 46(3), pp. 253-259, Mar 2019
- [8] C. Park, J. Kim, Y. Kee, J. Kim, S. Yoon, E. Choi, and I. Kim, WICWIU: C++ based Deep Learning Open Source Framework with Readability and Extensibility, *Korea Computer Congress (KCC)*, Jun 2018 (Best paper award) [git]
- [9] J. Lee, **J. Kim**, K. Won, M. Kwon, S.C. Jun, and M. Ahn, Minimizing calibration time in Brain-Computer Interface using Massive data and Artificial Neural Network, *Korea Computer Congress (KCC)*, Jun 2018
- [10] Y. Jeong, **J. Kim**, S. Kim, and I. Kim, Vision-based Blind Spot Vehicle Detection Using Machine Learning, *Korea Multimedia Society (KMMS)*, May 2017 (**Best undergraduate student paper award**)
- [11] **J. Kim**, Y. Kang, and K. Kim, Table Structure Recognition in Images for Newspaper Reader Application for the Blind, *Journal of Korea Multimedia Society*, 19(11), pp. 1837-1851, Nov 2016

#### **Patents**

1. **J. Kim** and S. Hong, Patent Application No. 10-2021-0097630 of South Korea, Method and system for extracting fine-grained traceability links between API document comments and test code lines, Jul 2021

#### **Awards**

- 1. Top prize award, Korean Society for EEG and Neurophysiology (winter school), Aug 2018
- 2. Best short paper award, Korea Computer Conference (KCC), Jun 2018
- 3. Excellent prize award, Korean Society for Computational Neuroscience (winter school), Feb 2018
- 4. Best undergraduate student paper award, Korea Multimedia Society (KMMS), May 2017

#### Activities

- 1. Teaching assistant, Discrete Mathematics, Sep 2019 Dec 2019, and Sep 2020 Dec 2020
- 2. Teaching assistant, Operating Systems, Mar 2019 Jun 2019, and Mar 2020 Jun 2020
- 3. Teaching assistant, Software Engineering, Mar 2019 Jun 2019
- 4. Tutor, Programming Basics for North Korean defectors, Mar 2019 Jun 2019
- 5. IT Professional Volunteer, Université Liberté, Democratic Republic of the Congo, Sep 2015 Jul 2016
- President, See-seon: A Student Group for Helping the Handicapped by Developing Appropriate Information Technology, Handong Global University, Jul 2014 – Jun 2015
- 7. President, Community leadership training team, Sep 2014 Dec 2014

(last updated: Feb 1, 2025)