

Eunho Cho

Ph.D. Candidate, Web Engineering Lab, School of Computing, KAIST

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RESEARCH INTERESTS

Software Engineering for AI · Critical ML-Enabled Systems · Cyber-Physical Systems · Self-Adaptive Systems · Systems of Systems

EDUCATION

Ph.D. Candidate in School of Computing, KAIST

Mar 2022 – Present

Advisor: In-Young Ko · GPA: 3.98 / 4.30

Master in School of Computing, KAIST

Mar 2020 – Feb 2022

Advisor: Doo-Hwan Bae

Thesis: *Anomaly-aware adaptation approach for self-adaptive cyber-physical system of systems using reinforcement learning*

Bachelor in School of Computing & School of Business and Technology Management, KAIST

Mar 2015 – Feb 2020

GPA: 3.50 / 4.30

PUBLICATIONS

INTERNATIONAL CONFERENCES AND WORKSHOPS

- C8 Eunho Cho**, Donghwan Shin, and In-Young Ko. **Evolution-Aware Regression Test Prioritization of ML-Enabled Systems Using Gradient-Based Behavior Vectors**. *International Conference on Automated Software Engineering (ASE 2026)*, Oct 2026. (Accepted) doi:10.48550/arXiv.2606.28037
- C7 Eunho Cho**. **Towards Behavior-Space Testing of Critical ML-Enabled Systems**. *International Conference on Software Engineering (ICSE 2026), Doctoral Symposium*, Apr 2026. doi:10.1145/3774748.3787661
- C6 Eunho Cho** and In-Young Ko. **Adaptive ML-Enabled Edge-Cloud System Framework for Safe and Efficient Autonomous Systems**. *International Workshop on Big data driven Edge Cloud Services (BECS 2025)*, Jun 2025. doi:10.1007/978-3-032-11233-0_1
- C5 Eunchan Park**, Kyeongdeok Baek, **Eunho Cho**, and In-Young Ko. **DESA: Decentralized Self-Adaptive Horizontal Autoscaling for Bursts of Load in Fog Computing**. *International Workshop on Big data driven Edge Cloud Services (BECS 2023)*, Jun 2023. doi:10.1007/978-3-031-50385-6_3
- C4 Eunho Cho**, Gwangoo Yeo, Eunkyong Jee, and Doo-Hwan Bae. **Anomaly-Aware Adaptation Approach for Self-Adaptive Cyber-Physical System of Systems Using Reinforcement Learning**. *Annual System of Systems Engineering Conference (SoSE 2022)*, Jun 2022. doi:10.1109/sose55472.2022.9812671
- C3 Young-Min Baek**, **Eunho Cho**, Yong-Jun Shin, and Doo-Hwan Bae. **A Modeling Method to Represent Geographical Information of a System-of-Systems**. *Annual System of Systems Engineering Conference (SoSE 2021)*, Jun 2021. doi:10.1109/SOSE52739.2021.9497462
- C2 Eunho Cho**, Juyeon Yoon, Daehyeon Back, Dongman Lee, and Doo-Hwan Bae. **DNN Model Deployment on Distributed Edges**. *International Workshop on Big data driven Edge Cloud Services (BECS 2021)*, May 2021. doi:10.1007/978-3-030-92231-3_2
- C1 Yong-Jun Shin**, **Eunho Cho**, and Doo-Hwan Bae. **PASTA: An Efficient Proactive Adaptation Approach Based on Statistical Model Checking for Self-Adaptive Systems**. *International Conference on Fundamental Approaches to Software Engineering (FASE 2021)*, Mar 2021. doi:10.1007/978-3-030-71500-7_15

JOURNAL ARTICLES

- J2 Eunho Cho** and In-Young Ko. **Data-Driven Adaptive ML-Enabled Edge-Cloud System Framework for Safe and Efficient Autonomous Systems**. *Journal of Web Engineering* 25(3), Apr 2026. doi:10.13052/jwe1540-9589.2531
- J1 Eunchan Park**, Kyeongdeok Baek, **Eunho Cho**, and In-Young Ko. **Fully Decentralized Horizontal Autoscaling for Burst of Load in Fog Computing**. *Journal of Web Engineering* 22(6), Dec 2023. doi:10.13052/jwe1540-9589.2261

DOMESTIC CONFERENCES

- D6** Janghyun Gim, **Eunho Cho**, and In-Young Ko. **A Preliminary Systematic Literature Review on Mitigating LLM Hallucination for Code Generation**. *Korea Software Congress (KSC 2025)*, Dec 2025. [PDF](#)
- D5** **Eunho Cho**, Juyeon Yoon, and In-Young Ko. **Fault Injection Framework for DNN-Enabled Cyber-Physical Systems**. *Korea Software Congress (KSC 2022)*, Dec 2022. [PDF](#)
- D4** Se-Yeon Kim, Na-Yeon Kim, Yu-jin Yang, **Eunho Cho**, and Eunkyoun Jee. **Development of Braille Document Translation Application Using Braille Detection Deep Learning Model**. *Korea Computer Congress (KCC 2022)*, Jun 2022. **Outstanding Youth Paper Award**. [PDF](#)
- D3** **Eunho Cho**, Sumin Park, Lingjun Liu, Chua Kiat Kian Anthony, and Doo-Hwan Bae. **Analysis and Application of Runtime Verification Property Specification Patterns of System of Systems**. *Korea Software Congress (KSC 2020)*, Dec 2020. **Outstanding Presentation Award**. [PDF](#)
- D2** **Eunho Cho**, Yong-Jun Shin, Eunkyoun Jee, and Doo-Hwan Bae. **Comparative Analysis of Fault-Attack Tree Based Safety and Security Assessment Approaches**. *Korea Software Congress (KSC 2019)*, Dec 2019. [PDF](#)
- D1** Tae-Hwan Kim, **Eunho Cho**, Yong-Jun Shin, and Doo-Hwan Bae. **Data-Driven Traffic Environment System-Dynamics Model Generation & Inference Method**. *Korea Software Congress (KSC 2018)*, Dec 2018. **Outstanding Youth Paper Award**. [PDF](#)

PATENTS

- Method and System for Decentralized Self-Adaptive Horizontal Autoscale for Bursts of Load in Fog Computing** Dec 2023
In-Young Ko, Eunchan Park, Kyeongdeok Baek, and **Eunho Cho**
Korea patent application 10-2023-0181178, filed Dec 2023
- Proactive Adaptation Approach Based On Statistical Model Checking For Self-Adaptive Systems** Sep 2023
Doo-Hwan Bae, Yong-Jun Shin, and **Eunho Cho**
Registered Korea patent 10-2585570, Sep 2023 (filed May 2021)

RESEARCH PROJECTS

- Physical AI SDF-Specialized Foundation Model for Autonomous Factory Operations** Aug 2026 – Present
National IT Industry Promotion Agency, Ministry of Science and ICT, Korea
- SafetyOps for Enhancing the Safety of Edge-Cloud-Based Mobility Cyber-Physical Systems of Systems** Apr 2025 – Present
Institute of Information & Communications Technology Planning & Evaluation, Ministry of Science and ICT, Korea
- Development of Software-Defined Infrastructure Technologies for Future Mobility** Apr 2024 – Dec 2027
Institute of Information & Communications Technology Planning & Evaluation, Ministry of Science and ICT, Korea
- Simulation-based Test Method for NN Perception** Mar 2024 – Feb 2027
Samsung Electronics
- Research on an Edge Computing based AI Service Platform for Proactive Traffic Safety using Big Data** Mar 2022 – Dec 2022
Ministry of Land, Infrastructure and Transport, Korea
- Development of Dependable and Highly Usable Big Data Platform, and Analysis and Prediction Services Technology in Edge Clouds** Jul 2020 – Dec 2027
Institute of Information & Communications Technology Planning & Evaluation, Ministry of Science and ICT, Korea
- (SW STAR LAB) Software R&D for Model-Based Analysis and Verification of Higher-Order Large Complex System** Mar 2020 – Dec 2022
Institute of Information & Communications Technology Planning & Evaluation, Ministry of Science and ICT, Korea

AWARDS AND HONORS

- University-Industry Cooperation Best Paper Award, Runner-up**, Samsung Electronics Aug 2026
- Outstanding Presentation Award**, Korea Software Congress (KSC 2020) Dec 2020
- Graduate Student Scholarship**, Korean Government Mar 2020 – Present
- Outstanding Paper Award**, Korea Software Congress (KSC 2018) Dec 2018
- Korean Government Scholarship**, Korean Government Mar 2015 – Feb 2020

PROFESSIONAL SERVICE

PROGRAM COMMITTEE

Program Committee Member (Research Track), International Conference on AI Engineering – Software Engineering for AI (CAIN 2027) Apr 2027

ORGANIZING COMMITTEE

Web Chair, Asia-Pacific Software Engineering Conference (APSEC 2023) Dec 2023

STUDENT VOLUNTEER

Student Volunteer, International Conference on Software Engineering (ICSE 2026) Apr 2026

Student Volunteer, Asia-Pacific Software Engineering Conference (APSEC 2023) Dec 2023

Virtualization Live! Team Member, International Conference on Software Engineering (ICSE 2020) Jul 2020

EXPERIENCE & TEACHING

Head Teaching Assistant (CS101, Introduction to Programming), KAIST Mar 2023 – Present

Teaching Assistant (CS459, Introduction to Services Computing), KAIST Sep 2022 – Dec 2022

Teaching Assistant (CS350, Introduction to Software Engineering), KAIST Mar 2022 – Jun 2022

Teaching Assistant (CS350, Introduction to Software Engineering), KAIST Sep 2020 – Jun 2021

Tutorial Assistant (CS101, Introduction to Programming), KAIST Sep 2018 – Dec 2018

Intern, IFE Jun 2018 – Aug 2018

Intern, Kakaopage Dec 2017 – Feb 2018

COMMUNITY SERVICE

Member of IT Media Team, Daedeok Presbyterian Church Jun 2023 – Present

Sunday School Teacher, Daedeok Presbyterian Church Jan 2021 – Dec 2022

Teacher, EduShare Jan 2015 – Feb 2016