SEOKJOO CHO

COMPUTER SCIENCE RESEARCHER

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OBJECTIVE

To become a person who not only benefits myself but also propagates positive influences on others;

To become a world-renowned operating system researcher and utilize my knowledge for contributing to the advancement of humanity.

RESEARCH INTERESTS

Operating Systems

- Designing and optimizing Memory Management systems in the Linux Kernel.
- Making parallel and concurrent OS components.
- Designing new data structure for OS components.

File and Storage System

- EXT4, XFS file system in the Linux Kernel.
- Making a new file system for emerging storage.
- Designing new concurrent data structure for improving I/O performance.

EDUCATION

Aug 2024 - Present	**Ph.D. in Computer Science** University of Illinois Urbana-Champaign
Mar 2020 - Aug 2022	**Bachelor of Engineering in School of Computer Science and Engineering** Chung-Ang University in Seoul, Korea - Double Majored
Mar 2016 - Aug 2022	**Bachelor of Science in Engineering in School of Mechanical Engineering** Chung-Ang University in Seoul, Korea - 4.06 / 4.5 GPA (Magna Cum Laude)

PUBLICATIONS

- [2] Kiet Tuan Pham[*1], **Seokjoo Cho**[*1], Sangjin Lee, Lan Anh Nguyen, Ipoom Jeong, Sungjin Lee, Nam Sung Kim, Yongseok Son, "ScaleCache: A Scalable Page Cache for Multiple Solid-State Drives.", In Proceedings of **ACM SIGOPS European Conference on Computer Systems (EuroSys '24)**, Athens, Greece, Apr 2024. ([*1] **Equally contribution**)

- [1] **Seokjoo Cho**, Sangjin Lee, Kiet Tuan Pham, Nguyen Lan Anh, Sunggon Kim, Yongseok Son, "A Survey on Minimizing Lock Contention in Shared Resources in Linux Kernel.", In Proceedings of **International Conference on ICT Convergence (ICTC '22)**, Jeju, Korea, Oct 2022.

EXPERIENCES

Aug 2024 - Present	**Research Assistant** University of Illinois Urbana-Champaign ▪ Distributed and Storage System Lab
Sep 2022 - Dec 2022	**Teaching Assistant** Chung-Ang Univ. in Seoul, Korea ▪ Linux System and its Application
Jul 2022 - Nov 2022	**Hyundai Motor Group H-Mobility Class (Autonomous Car program)** Seoul, Korea ▪ Completed course consisting of 5 major category: Perception, Localization, Decision-making, Control, Network.
Dec 2021 - Jul 2024	**Undergraduate Researcher** Chung-Ang Univ. in Seoul, Korea ▪ Systems and Storage Lab
Jul 2021 - Aug 2021	**Purdue Chung-Ang IITP-Summer-Program-2021** West Lafayette, IN (Online) ▪ Conducted a GPS-based IoT service design project on the topic of "Safety Monitoring System for Dementia Patients Using Smart Watch" with Purdue University. ▪ Implemented a back-end application using **Python Flask** as a server stack. ▪ Source available: https://github.com/ilovethisid/Smart-watch-for-Dementia-patient

AWARDS

Nov 2022	**Top Excellence Award, 2022 CAU SW-AI Tech Fair** Seoul, Korea ▪ Awarded **first place** in SW-AI Integrated Achievement category. ▪ Data Structure Monitoring: Implemented a simple library aimed at simplifying the tracking of changes within the internal data structures of the Linux Kernel.
Dec 2020	**President's Award from NRF, 4th X-corps Festival** Seoul, Korea ▪ Won **second place**, President's Award from the National Research Foundation of Korea (NRF). ▪ Designed a model for an indoor fitness facility environment that facilitates sustainable electricity generation. ▪ The research theme focused on converting exercise energy generated in the gym into electrical energy, storing it in an Energy Storage System (ESS), and reusing it.
Nov 2020	**Gabia Special Award, 2020 Open Source Contribution** Seoul, Korea ▪ Recognized and awarded for contributions to Ubuntu's Korean translation. ▪ Actively contributing to the localization efforts for Ubuntu, a Linux distribution, with a focus on L10N. ▪ Source available: https://translations.launchpad.net/~linuxlight

QUALIFICATIONS

Nov 2023 - Nov 2025   **TOEFL iBT**
- Total **104** out of 120 (RC 29, LC 29, SP 25, WR 21)

Feb 2022 - Feb 2024   **TOEIC**
- Total **905** out of 990 (LC 435, RC 470)

ADDITIONAL INFORMATION

Dec 2019 - Dec 2020   **President of University Student Club**
CAU Purm the Volunteers in Seoul, Korea
- Served as the president of educational volunteering club.
- Made efforts to actively collaborate with club executives in making the best decisions possible during the unprecedented challenges of the first year of the COVID-19 pandemic.

Apr 2017 - Jan 2019   **Military Service**
Gimpo, Korea
- Served in the Republic of Korea Marine Corps.
- Honorably discharged as a Marine Sergeant.