JINYOUNG OH

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eengblo.github.io

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) Sep 2020 -
M.S. in School of Computing *Daejeon, Republic of Korea*

Korea Advanced Institute of Science and Technology (KAIST) Mar 2016 - Aug 2020
B.S. in School of Computing (Advanced Major & Honor Program) *Daejeon, Republic of Korea*

- **Summa Cum Laude**. Graduated first in my class (School of Computing)
- Major GPA: **4.26/4.3** (4.0/4.0); Overall GPA: **4.15/4.3** (3.95/4.0); Upper GPA: **4.3/4.3** (4.0/4.0)

Georgia Institute of Technology Aug 2019 - Dec 2019
Exchange student *Atlanta, GA*

- GPA: **4.0/4.0**

PUBLICATION

1. **Jinyoung Oh**, Youngjin Kwon. Persistent Memory Aware Performance Isolation with Dicio. *12th ACM SIGOPS Asia-Pacific Workshop on Systems (APSys'21)* [link]
2. Wonsup Yoon, **Jinyoung Oh**, Jisu Ok, Sue Moon, Youngjin Kwon. DiLOS: Adding Performance to Paging-based Memory Disaggregation. *12th ACM SIGOPS Asia-Pacific Workshop on Systems (APSys'21)* [link]
3. Wonsup Yoon, **Jinyoung Oh**, Jisu Ok, Sue Moon, Youngjin Kwon. Poster: Accelerating Disaggregated Data Center Using Unikernel . *ACM SIGCOMM 2020*
4. Hyunsung Cho, **Jinyoung Oh**, Juho Kim, Sung-Ju Lee. I Share, You Care: Private Status Sharing and Sender-Controlled Notifications in Mobile Instant Messaging. *23rd ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW'20)* [link]
5. Hyunsung Cho, **Jinyoung Oh**, Juho Kim, Sung-Ju Lee. Demo: Sender-Controlled Mobile Instant Message Notifications Using Activity Information. *17th ACM Annual International Conference on Mobile Systems, Applications, and Services (MobiSys'19)*

HONORS AND AWARDS

KAIST Presidential Fellowship (KPF), KAIST, 2018 - 2020
- Honor for the top 2% student in KAIST; Funded up to $20,000 for academic activities

Summa Cum Laude, KAIST, 2020

Mirae Asset Global Exchange Scholarship, Mirae Asset Park Hyeon Joo Foundation, 2019
- $7,000 student grant for exchange student program

National Science and Engineering Scholarship, Korea Student Aid Foundation, 2018 - 2020
- Full tuition covered for Bsc. ($7,000/year, for 2 years)

KAIST Alumni's Scholarship, KAIST Alumni Association, 2017 - 2020
- $4,000/year for 3 years student grant

1st place in TKCTF 2019, Georgia Institute of Technology, 2019
- $1,000 prize

LINE Scholarship, LINE corporation, 2018
- $4,000 student grant

KAIST Leadership Mileage Diamond Award, KAIST, 2018
- Certification for the top 3% student with Leadership Mileage in KAIST

Dean's List × 2, KAIST, Spring 2018 & Fall 2018

Silver Award in Samsung Human-Tech Paper Award, Samsung Electronics co. ltd, 2015
- Awarded $5,000 as the first author of the good paper

RESEARCH INTERESTS

Systems for Machine Learning, Persistent Memory, Resource Disaggregation

RESEARCH EXPERIENCES

Persistent Memory Aware Performance Isolation Aug 2020 - (ongoing)

Ongoing project

Unikernel-based Disaggregated Memory System Optimization Jan 2020 - (ongoing)

Ongoing project

Sender-engaged Context-Aware Messaging Notification System Dec 2018 - Jan 2020

Design, implement, and conduct user experiment with new notification management system for Mobile Instant Messaging by sharing receiver's context with senderDesign and develop Android application that automatically regulates notification on behalf of a user

Study about TLB Shootdown in Linux Kernel for Optimization Feb 2018 - Jun 2018

Read several related papers and Linux kernel code that related to TLB shootdown to know about causes and find solutions for optimization

Geometry Education Platform with Haptics for Blind Students Jun 2017 - Aug 2017

Implemented prototype for blind students to learn quadratic curves and surfaces with haptic device

WORK EXPERIENCES

· **Hayanmind Co.** Jun 2018 - Nov 2018
Developer / Research Intern *Daejeon, Korea*

· Developed Android/iOS application with React Native for studying English with YouTube videos

· Improved usability by analyzing user behavior, redesigning and implementing new features

TECHNICAL SKILLS

Advanced	C, C++11, Javascript, React, React Native, Python, Arduino
Moderate	MATLAB, HTML/CSS, LaTeX, Android
Novice	Kotlin, C#, Unity, Java, OpenGL, CUDA, TensorFlow

LINGUISTIC SKILLS

Upper-intermediate in **English** and Native in **Korean**

· TOEFL iBT: 99 (Reading: 29, Listening: 29, Speaking: 17, Writing: 24), December 16th, 2018

· In KAIST, most lectures are held in English; also, have attended lab meetings held in English

TERM PROJECTS

Pintos Mar 2019 - May 2019

· Implemented kernel abstractions such as thread, virtual memory, and file system including system calls

Parallel sparse-dense matrix multiplication Mar 2019 - June 2019

· Designed and implemented parallel algorithm for sparse-dense matrix multiplication with CUDA, SSE, OpenMP, and Pthread

KENS: my Implementation of TCP [link] Sep 2018 - Dec 2018

· Implemented most TCP functions from `socket()` to `close()`, including Congestion Control

Custom-built computer purchasing platform for newbies [link] Mar 2018 - Jun 2018

· Implemented a platform for newbies to purchase custom-built computer; focused on usability

Utility-based Way-partitioning with Dynamic Insertion Policy [link] Mar 2018 - Jun 2018

· Suggested and implemented new cache insertion and partitioning policy and evaluated its performance