## Hyeongjun Park

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hj97hj94@g.skku.edu <a href="mailto:zzunny97@gmail.com">zzunny97@gmail.com</a>

#### **EDUCATION**

#### Sungkyunkwan University (SKKU)

B.S in Computer Science and Engineering

- Cumulative GPA: Overall 4.11/4.5, Major 4.23/4.5

Suwon, South Korea Mar. 2016 - Present

#### RESEARCH INTEREST

Storage Systems, Database Systems, Distributed Systems

#### **PUBLICATION**

# [1] ListDB: Union of Write-Ahead Logs and SkipLists for Incremental Checkpointing on Persistent Memory

Wonbae Kim, Chanyeol Park, Dongui Kim, <u>Hyeongjun Park</u>, Young-ri Choi, Alan Sussman, Beomseok Nam

To appear in the 16th USENIX Symposium on Operating Systems Design and Implementation (OSDI 2022), July. 2022.

### [2] VeloxDFS: Streaming Access to Distributed Datasets to Reduce Disk Seeks

Sunghwan Ahn, <u>Hyeongjun Park</u>, V. A. Boleaz Sanchez, Deukyeon Hwang, Wonbae Kim, Alan Sussman, Beomseok Nam

22nd IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing (CCGrid 2022), May. 2022.

- Co-first author

#### RESEARCH EXPERIENCE

#### Data Intensive Computing Lab, SKKU

Undergraduate Research Intern

Suwon, South Korea Mar. 2018 - Dec. 2020

- Conducted research on a key-value store that that leverages the byte-addressability and high-performance of DCPM to resolve the write amplification and write stall problem [1].
- Conducted research on a shared storage systems for immutable data by leveraging the distance connectivity of NVMe over Fabrics (NVMe-oF).
- Designed and implemented a distributed file system, *VeloxDFS*, that coordinates concurrent I/O requests from multiple clients by dynamically adjusting the size of partitioned blocks to mitigate the skew problem [2].

# Parallel and Distributed Computing Lab, University of Maryland Visiting Research Intern College Park, Maryland Jul. 2019 - Aug. 2019

• Conducted research in the area of distributed file systems, especially on performance analysis of Hadoop Distributed File System (HDFS) and I/O scheduling overhead of Yet Another Resource Negotiator(YARN) using *TestDFSIO* and various monitoring tools.

#### WORK EXPERIENCE

#### Company LSC Systems

Suwon, South Korea

Leader Developer of industry-university cooperation project, 5 members

May. 2019 - Dec. 2019

• Developed straggler identification and diagnosis model for data center using Scikit-learn and Tensorflow.

#### **Company Entasys**

Suwon, South Korea

Leader Developer of industry-university cooperation project, 5 members

May. 2018 - Dec. 2018

• Developed parallel linear matrix solver using OpenMP library and furtherly elaborated to cluster-level using MPI library.

#### TEACHING EXPERIENCE

#### Teaching Assistant, SKKU

Spring 2020

Basis and Practice in Programming

#### VOLUNTEERING

#### World Friends ICT Voluenteers Program 2018

Vientine, Laos

Vice Team Leader, 6 members

Jul. 2018 - Aug. 2018

• Educated Arduino programming for middle & high school students and teachers.

#### Suil High School Software Mentoring

Suwon, South Korea

Team Leader, 3 members

May. 2018 - Sep. 2018

• Educated basic C programming for Suil High School students who want to major in computer science after graduation.

#### HONORS AND SCHOLARSHIPS

Dean's List, Sungkyunkwan University2017-2019Software Scholarship, Sungkyunkwan University (merit-based)Mar. 2016 - PresentProgram-based Scholarship, Sungkyunkwan UniversitySpring. 2019Student Success Scholarship, Sungkyunkwan UniversitySpring. 2019

#### SELECTED TERM-PROJECTS ON COURSEWORK

#### Embedded Temple Run

May. 2020 - Jun. 2020

Embedded Systems, 2 members

• Developed a running game with Linux Kernel Driver for GPIO buttons and OLED display on Rasberry Pi using Crosstool-NG toolchain.

#### Market Place For File Sharing

Apr. 2020 - Jun. 2020

Introduction to Database

• Developed a online market place for file sharing with JDBC using MySQL connector and Java.

#### Online Flea Market

Web Programming

• Developed a online flea market website using MySQL, JSP, HTML/CSS and JavaScript.

### Alarm application

Apr. 2019 - Jun. 2019

Nov. 2019 - Dec. 2019

Mobile App Programming

• Developed an original android alarm application that analyzes user behaviors and reactions based on alarm-off duration using Java and Google Cloud Platform(GCP) Firebase.

#### REFERENCES

#### Beomseok Nam

Associate Professor Computer Science and Engineering College of Computing Sungkyunkwan University (SKKU)

bnam@skku.edu https://dicl.skku.edu

Last Update on Mar 21st. 2022