

# JUNO KIM

*PhD Student in Computer Science*

*Nationality: Korean*

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## RESEARCH INTERESTS

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I am generally interested in building scalable and reliable systems by leveraging emerging non-volatile memory technologies. My current research focuses on the performance analysis and optimizations of file systems and applications that are built on byte-addressable, high-performance Non-Volatile Main Memories (NVMM). I am also interested in building distributed storage systems.

## EDUCATION

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| Ph.D. student, University of California, San Diego<br>Advised by Prof. Steven Swanson. | 2017 - Present |
| B.S., ECE, Seoul National University<br>Overall GPA: 4.04/4.3 ( <i>honors</i> )        | Feb 2012       |

## PUBLICATIONS

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*Finding and Fixing Performance Pathologies in Persistent Memory Software Stacks.* ASPLOS 2019 (to appear).  
Jian Xu, **Juno Kim**, Amirsaman Memaripour, Steven Swanson

*The FuzzyLog: A Partially Ordered Shared Log.* OSDI 2018.  
Joshua Lockerman, Jose Faleiro, **Juno Kim**, Soham Sankaran, Daniel Abadi, James Aspnes, Siddhartha Sen, Mahesh Balakrishnan

## RELEVANT EXPERIENCE

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| Graduate Researcher, University of California, San Diego<br><i>Topic: Non-Volatile Main Memory file systems and applications.</i><br>At UCSD, I am exploring potential ways for legacy applications (e.g., databases, key-value stores) to maximize their performances on Non-Volatile Main Memory (NVMM) file systems.  | Sep 2017 - Present   |
| Graduate Researcher, Yale University<br><i>Topic: Partially ordered distributed storage system.</i><br>Shared log approach for building distributed storage systems has suffered scalability bottleneck by a centralized totally-ordered log. This work explored a new shared log design that exposes partial order to the programmers.                                      | Aug 2016 - May 2017  |
| Software Engineer, SAP Labs Korea<br><i>Topic: Main-memory database system SAP HANA.</i><br>In contrast to disk (or SSD) based database systems, main-memory database provides high performance by keeping entire data in fast, volatile memory. I worked on database metadata access optimizations in single and distributed settings for customer-ready database products. | Dec 2011 - July 2014 |

## PROGRAMMING SKILLS

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C/C++, Python, Java, Shell, Ocaml.

## LANGUAGES

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English, Japanese: Proficient. Korean: Native.