(203) 300-9151
Fullerton, CA
juno.k.kim@oracle.com

Juno Kim

Software Engineer

GitHub: juno-kim
LinkedIn: junokim8

I'm currently a software engineer at Oracle where I build Oracle's next-generation database products.

Education

Ph.D. in Computer Science, *University of California, San Diego* Jun 2023
Advisor: Dr. Steven Swanson
- Dissertation: Advanced Software Techniques for Emerging Memory Technologies

M.S. in Computer Science, *University of California, San Diego* Jun 2020
Advisor: Dr. Steven Swanson

B.S. in Electrical & Computer Engineering, *Seoul National University, Korea* Feb 2012
- The period includes 3 years of military service mandatory in Korea.

Work Experience

Principal Member of Technical Staff **Jan 2023 — Current**
Oracle, DST group (Manager: Shubha Bose) *Fullerton, CA (Remote)*
- I am responsible for building and improving data, space, transaction layer of Oracle Database products.

Research Intern **Jun 2022 — Sep 2022**
Intel Labs, System Software Architecture Lab (Mentor: Sanjay K. Kumar, Andy Anderson) *San Diego, CA (Remote)*
- Worked on the Linux kernel support for new memory tiering hardware technology

Software Engineering Intern **Jun 2021 — Sep 2021**
Intel Optane Group (Mentor: Andy Rudoff, Piotr Balcer) *San Diego, CA (Remote)*
- Worked on prototyping a software library that leverages Intel's Data Streaming Accelerator (DSA) technology for efficient persistent memory access.

Research Intern **Jun 2019 — Sep 2019**
IBM Research Storage Group (Mentor: Deepavali Bhagwat, Scott Guthridge) *San Jose, CA*
- Worked on building a testing tool for checking crash-consistency of persistent memory-aware programs.

Software Engineer **Dec 2011 — Jul 2014**
SAP Labs *Seoul, Korea*
- Worked on building in-memory database engine with the focus on efficient database metadata access in distributed setting.

Publication

Blaze: Fast Graph Processing on Fast SSDs **SC 2022**
***Juno Kim**, Steven Swanson*

Ayudante: A Deep Reinforcement Learning Approach to Assist Persistent Memory Programming **ATC 2021**
*Hanxian Huang, Zixuan Wang, **Juno Kim**, Steven Swanson, and Jishen Zhao*

Sub-Zero: Zero-copy IO for Persistent Main Memory File Systems **APSys 2020**
***Juno Kim**, Yun Joon Soh, Joseph Izraelevitz, Jishen Zhao, Steven Swanson* *Best Paper*

An Empirical Guide to the Behavior and Use of Scalable Persistent Memory **FAST 2020**
*Jian Yang, **Juno Kim**, Morteza Hoseinzadeh, Joseph Izraelevitz, Steven Swanson*

Finding and Fixing Performance Pathologies in Persistent Memory Software Stacks **ASPLOS 2019**
Jian Xu, **Juno Kim***, Amirsaman Memaripour, Steven Swanson (*co-first authors)*

Basic Performance Measurements of the Intel Optane DC Persistent Memory Module **arXiv 2019**
*J. Izraelevitz, J. Yang, L. Zhang, **J. Kim**, X. Liu, A. Memaripour, Y. Soh, Z. Wang, Y. Xu, S. Dulloor, J. Zhao, S. 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*

(203) 300-9151
Fullerton, CA
juno.k.kim@oracle.com

Juno Kim

Software Engineer

GitHub: juno-kim
LinkedIn: junokim8

Talks

Sub-Zero: Zero-copy IO for Persistent Main Memory File Systems — APSys 2020, Virtual

Finding and Fixing Performance Pathologies in Persistent Memory Software Stacks — ASPLOS 2019, Providence, RI

Service

External reviewer at DISC 2020
External reviewer at IEEE MASCOTS 2019

Teaching Experience

Modern Storage Systems (UCSD CSE291A), Fall 2019
Instructor: Dr. Steven Swanson

Skills

Technical	C/C++, Python, Go, Shell, SQL
Communication	English, Korean, Japanese