Ingab Kang | igkang@umich.edu

EDUCATION

◇ **Doctor of Philosophy, Computer Science and Engineering**   Sep. 2020 - Present
University of Michigan.
Advisor: Daniel Genkin
Research Topic: Rowhammer attack and defences
GPA: 3.753 / 4.0

◇ **Master of Science, Intelligent Systems**   Mar. 2018 - Feb. 2020
Seoul National University, Korea.
Thesis: CAT-TWO: Counter-based Adaptive Tree, Time Window
Optimized for DRAM Rowhammer Prevention
Advisor: Jung Ho Ahn
GPA : 4.12 / 4.30

◇ **Bachelor of Science, Electrical and Computer Engineering**   Mar. 2011 - Feb. 2018
Seoul National University, Korea.
Major GPA: 3.42 / 4.30
∗ 2 year leave due to military service

WORK
EXPERIENCE

◇ **Intern**, Context Part, Kakao Enterprise   Mar. 2020 – Aug. 2020
Worked on optimizing mobile NMT and deployment

◇ **Visiting Scholar**, Computer Systems Laboratory   Oct. 2019 – Dec. 2019
Cornell University
Advisor: Prof. G. Edward Suh
Research topic: memory deduplication & compression

◇ **Intern**, Mobile Communications Business, Samsung Electronics   Jul. 2017 – Aug. 2017

PUBLICATIONS

1. Youssef Tobah, Andrew Kwong, Ingab Kang, Daniel Genkin, Kang G. Shin "SpecHammer: Combining Spectre and Rowhammer for new speculative attacks," *IEEE Security and Privacy* (Oakland), 2022

2. Sungbo Park, Ingab Kang, Yaebin Moon, Jung Ho Ahn, G. Edward Suh "BCD Deduplication: Effective Memory Compression Using Partial Cache-Line Deduplication, " *International Conference on Architectural Support for Programming Languages and Operating Systems* (ASPLOS), 2021

3. Ingab Kang, Eojin Lee, and Jung Ho Ahn "CAT-TWO: Counter-based Adaptive Tree, Time Window Optimized," *IEEE Access*, 2020.

4. Eojin Lee, Ingab Kang, Sukhan Lee, G. Edward Suh, and Jung Ho Ahn "TWiCe: Preventing Row-hammering by Exploiting Time Window Counters," *International Symposium on Computer Architecture (ISCA)*, 2019.

5. Kangjin Yoon, Taejun Park, Jihoon Kim, Weiping Sun, Sunwook Hwang, Ingab Kang, and Sunghyun Choi "COTA: Channel occupancy time adaptation for LTE in unlicensed spectrum," *International Symposium on Dynamic Spectrum Access Networks* (DySPAN), 2017.

HONORS/
AWARDS

◇ **National Scholarship for Science and Engineering**, Mar.   2011 – Feb. 2012
Korea Student Aid Foundation, Seoul, Korea

◇ **Superior Academic Performance Scholarship**,   Spring 2015, Fall 2015, Spring 2016
Seoul National University, Seoul, Korea

TEACHING
EXPERIENCE

◇ **Teaching Assistant**, Digital System Design and Practice,   Sep. 2018 – Dec. 2018
Seoul National University