Ingab Kang | igkang@umich.edu

EDUCATION	 Doctor of Philosophy, Computer Science and Engineering University of Michigan. 	Sep. 2020 - Present
	Advisor: Daniel Genkin, Alex Halderman Research Topic: Rowhammer attack and defenses Expected Graduation: 05/25	
	⋄ 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	
	 Bachelor of Science, Electrical and Computer Engineering Seoul National University, Korea. * 2 year leave due to military service 	Mar. 2011 - Feb. 2018
RESEARCH EXPERIENCE	 Visiting Scholar, Computer Systems Laboratory Cornell University Advisor: G. Edward Suh 	Oct. 2019 – Dec. 2019
	Research topic: memory deduplication & compression	
	 Undergraduate Researcher, MWNL Seoul National University Advisor: Sunghyun Choi 	Jan. 2016 – May. 2016
	Research topic: LTE deployment in the unlicensed spectrum	
Work experience	 Intern, Context Part, Kakao Enterprise Worked on optimizing mobile NMT and deployment 	Mar. 2020 – Aug. 2020
	⋄ Intern , Mobile Communications Business, Samsung Electronics	Jul. 2017 – Aug. 2017
PUBLICATIONS	1. Youssef Tobah, Andrew Kwong, <u>Ingab Kang</u> , Daniel Genkin, Kang G. Shin "SpecHammer: Combining Spectre and Rowhammer for new speculative attacks," <i>IEEE Symposium on Security and Privacy</i> (S&P), 2022	
	2. Sungbo Park, <u>Ingab Kang</u> , Yaebin Moon, Jung Ho Ahn, G. Edward Suh "BCD Deduplication: Effective Memory Compression Using Partial Cache-Line Deduplication," <i>International Conference on Architectural Support for Programming Languages and Operating Systems</i> (ASPLOS), 2021	
	3. <u>Ingab Kang</u> , Eojin Lee, and Jung Ho Ahn "CAT-TWO: Counter-based Adaptive Tree, Time Window Optimized," <i>IEEE Access</i> , 2020.	
	4. Eojin Lee, <u>Ingab Kang</u> , Sukhan Lee, G. Edward Suh, and Jung Ho Ahn "TWiCe: Preventing Row-hammering by Exploiting Time Window Counters," <i>International Symposium on Computer Architecture (ISCA)</i> , 2019.	
	5. Kangjin Yoon, Taejun Park, Jihoon Kim, Weiping Sun, Sunwook H Sunghyun Choi "COTA: Channel occupancy time adaptation for trum," <i>International Symposium on Dynamic Spectrum Access Network</i>	LTE in unlicensed spec-
PATENT	♦ US Patent 11,037,618 , Eojin Lee, <u>Ingab Kang</u> , and Jung Ho Ahn "Row hammer prevention circuit, a memory module including the row hammer prevention circuit, and a memory system including the memory module"	
PEER REVIEW	♦ USENIX Security, 22	

 \diamond **Proficient Programming Languages:** C/C++, Python, Rust

SKILLS