

EDUCATION	<ul style="list-style-type: none"><li>◇ <b>Doctor of Philosophy, Computer Science and Engineering</b> Sep. 2020 - Present University of Michigan. Advisor: Daniel Genkin Research Topic: Rowhammer attack and defenses Expected Graduation: May 2025</li><li>◇ <b>Master of Science, Intelligent Systems</b> Mar. 2018 - Feb. 2020 Seoul National University Thesis: CAT-TWO: Counter-based Adaptive Tree, Time Window Optimized for DRAM Rowhammer Prevention Advisor: Jung Ho Ahn</li><li>◇ <b>Bachelor of Science, Electrical and Computer Engineering</b> Mar. 2011 - Feb. 2018 Seoul National University * 2 year leave due to military service</li></ul>
RESEARCH EXPERIENCE	<ul style="list-style-type: none"><li>◇ <b>Visiting Scholar</b>, Computer Systems Laboratory Oct. 2019 – Dec. 2019 Cornell University Advisor: G. Edward Suh Research topic: memory deduplication &amp; compression</li><li>◇ <b>Undergraduate Researcher</b>, MWNL Jan. 2016 – May. 2016 Seoul National University Advisor: Sunghyun Choi Research topic: LTE deployment in the unlicensed spectrum</li></ul>
WORK EXPERIENCE	<ul style="list-style-type: none"><li>◇ <b>Intern</b>, Context Part, Kakao Enterprise Mar. 2020 – Aug. 2020 Worked on optimizing mobile NMT and deployment</li><li>◇ <b>Intern</b>, Mobile Communications Business, Samsung Electronics Jul. 2017 – Aug. 2017</li></ul>
PUBLICATIONS	<ol style="list-style-type: none"><li>1. <a href="#">Ingab Kang</a>, Walter Wang, Jason Kim, Stephan van Schaik, Youssef Tobah, Daniel Genkin, Andrew Kwong, Yuval Yarom "SledgeHammer: Amplifying Rowhammer via Bank-level Parallelism," <i>USENIX Security</i>, 2024</li><li>2. Youssef Tobah, <a href="#">Ingab Kang</a>, Andrew Kwong, Daniel Genkin, Kang G. Shin "Go Go Gadget Hammer: Flipping Nested Pointers for Arbitrary Data Leakage," <i>USENIX Security</i>, 2024</li><li>3. Youssef Tobah, Andrew Kwong, <a href="#">Ingab Kang</a>, Daniel Genkin, Kang G. Shin "SpecHammer: Combining Spectre and Rowhammer for new speculative attacks," <i>S&amp;P</i>, 2022</li><li>4. Sungbo Park, <a href="#">Ingab Kang</a>, Yaebin Moon, Jung Ho Ahn, G. Edward Suh "BCD Deduplication: Effective Memory Compression Using Partial Cache-Line Deduplication," <i>ASPLOS</i>, 2021</li><li>5. <a href="#">Ingab Kang</a>, Eojin Lee, and Jung Ho Ahn "CAT-TWO: Counter-based Adaptive Tree, Time Window Optimized," <i>IEEE Access</i>, 2020.</li><li>6. Eojin Lee, <a href="#">Ingab Kang</a>, Sukhan Lee, G. Edward Suh, and Jung Ho Ahn "TWiCe: Preventing Row-hammering by Exploiting Time Window Counters," <i>ISCA</i>, 2019.</li><li>7. Kangjin Yoon, Taejun Park, Jihoon Kim, Weiping Sun, Sunwook Hwang, <a href="#">Ingab Kang</a>, and Sunghyun Choi "COTA: Channel occupancy time adaptation for LTE in unlicensed spectrum," <i>DySPAN</i>, 2017.</li></ol>
PATENT	<ul style="list-style-type: none"><li>◇ <b>US Patent 11,037,618</b>, Eojin Lee, <a href="#">Ingab Kang</a>, 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"</li></ul>
PEER REVIEW	<ul style="list-style-type: none"><li>◇ <b>USENIX Security</b>, 2022</li><li>◇ <b>IEEE Transactions on Computers</b>, 2023</li></ul>
SKILLS	<ul style="list-style-type: none"><li>◇ <b>Proficient Programming Languages:</b> C/C++, Python, Rust</li></ul>