# Alexander Hankin

Curriculum Vitae

#### Contact Information

Email: alexander.hankin@tufts.edu

#### **EDUCATION**

Ph.D., M.S. Electrical Engineering Tufts University, Medford, MA, USA Advisor: Prof. Mark Hempstead expected 2021, 2017

# B.S. Computer Engineering

Tufts University, Medford, MA, USA

2016

#### **PUBLICATIONS**

- L. Pentecost\*, A. Hankin\*, M. Donato, M. Hempstead, G. Y. Wei, and D. Brooks (\*joint first authors), "NVMExplorer: A Framework for Cross-Stack Comparisonsof Embedded Non-Volatile Memory Solutions," under review at MICRO 2021.
- A. Hankin, D. Werner, J. Sebot, K. Vaidyanathan, M. Amiraski, and M. Hempstead, "HotGauge: A Methodology for Characterizing Hotspots in Next Generation Processors," under review at MICRO 2021.
- **A. Hankin** and M. Hempstead, "Proposal for a Timing Model of Ion Trap Quantum Architectures," to appear in I too can Quantum! at ISCA 2021.
- **A. Hankin**, M. Amiraski, K. Sangaiah, and M. Hempstead, "Toward Faster and More Efficient Training on CPUs Using STT-RAM-based Last Level Cache," 12th Annual Non-Volatile Memories Workshop (NVMW), San Diego, CA, USA, 2021.
- **A. Hankin**, T. Shapira, K. Sangaiah, M. Lui and M. Hempstead, "Evaluation of Non-Volatile Memory Based Last Level Cache Given Modern Use Case Behavior," 2019 IEEE International Symposium on Workload Characterization (IISWC), Orlando, FL, USA, 2019, pp. 143-154, doi: 10.1109/IISWC47752-.2019.9042051.

## PROFESSIONAL EXPERIENCE

Teaching and Research Assistant Tufts University June 2017 - Present Medford, MA, USA

Research Intern

June 2020 - Aug 2020

Intel

Hillsboro, OR, USA

Research Intern

Jan 2019 - July 2019 Mountain View, CA, USA

Google

## TEACHING EXPERIENCE

Tufts University	Medford, MA, USA
Teaching Assistant, Advanced Computer Architecture	Spring 2021
Teaching Assistant, Electronics	Spring 2020
Teaching Assistant, Object-Oriented Programming for Graduate Students	Fall 2019
Teaching Assistant, Advanced Computer Architecture	Spring 2019
Teaching Assistant, Computer Engineering	Fall 2018

### CONFERENCE TALKS

"Evaluation of Non-Volatile Memory Based Last Level Cache Given Modern Use Case Behavior," 2019 IEEE International Symposium on Workload Characterization (IISWC), Orlando, FL, USA, 2019.

### WORKSHOP TALKS

"Proposal for a Timing Model of Ion Trap Quantum Architectures," to happen at I too can Quantum! at ISCA 2021.

## POSTER PRESENTATIONS

"Toward Faster and More Efficient Training on CPUs Using STT-RAM-based Last Level Cache," 12th Annual Non-Volatile Memories Workshop (NVMW), San Diego, CA, USA, 2021.