Alexander Singh La Cour

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Education

Princeton University — Princeton, NJ
Ph.D., Electrical and Computer Engineering   2021-Present
  – Research Areas: Neural Combinatorial Optimization over Graphs, Sequence Modeling
  – Advisor: Prof. Niraj K. Jha
M.A., Electrical and Computer Engineering   2021-2023

Cornell University — Ithaca, NY
B.S., Electrical and Computer Engineering (Summa Cum Laude)   2018-2021

Awards

Francis Robbins Upton Fellowship (highest honor for incoming students)	2021
Intel Semiconductor Research Corporation Program Scholar	2020 – 2021
Cornell Engineering Learning Initiative Research Grant	2020
IEEE Eta Kappa Nu Member	2019 – Present
Cornell University College of Engineering Dean's List	2018 – 2019

Publications

[Wireless Charging Power Side-Channel Attacks](#)
Alexander S. La Cour, Khurram K. Afridi, G. Edward Suh.
*ACM Conference on Computer and Communications Security (**CCS**), 2021*

Research Experience

Suh Research Group — *Undergraduate Researcher*; Ithaca, NY   Aug 2019 – Nov 2021
  – Demonstrated the existence of a novel wireless charging power side-channel on modern smartphones using supervised learning and published a paper on my findings

Zhang Research Group — *Research Assistant*; Ithaca, NY   Jan 2019 – May 2019
  – Implemented a high-level synthesis benchmark algorithm from MachSuite, a collection of benchmarks for customized architecture, into HeteroCL, an open-source programming infrastructure

Work and Project Experience

Marvell Technology — *ASIC Design Intern*; Marlborough, MA   Summer 2019
CU Autonomous Underwater Vehicle — *Electrical Subteam*; Ithaca, NY   Oct 2018 – May 2020

Teaching

Machine Learning for Predictive Data Analytics (ECE 364, Princeton University)	Fall 2022
Signals and Information (ECE 2200, Cornell University)	Spring 2021
Embedded Systems (ECE 3140/CS 3420, Cornell University)	Spring 2020

Skills

Python, PyTorch, TensorFlow, MATLAB, Git, LaTeX