

# Adam K. HASTINGS

<last name>@cs.columbia.edu

## EDUCATION

---

- 2018–2022 PHD, Computer Science, **Columbia University**, New York, NY  
Research Topic: Discovering Methods for Measuring the Cost of Security  
Advisor: Dr. Simha SETHUMADHAVAN
- 2016–2018 MS, Electrical & Computer Engineering, **Brigham Young University**, Provo, UT  
Thesis: *Assuring Intellectual Property Through Physical and Functional Comparisons*  
Advisor: Dr. Brad HUTCHINGS
- 2012–2016 BS, Computer Engineering, **Brigham Young University**, Provo, UT  
Minors: MATHEMATICS, COMPUTER SCIENCE

## WORK EXPERIENCE

---

- 2018–present | Research Assistant, COLUMBIA UNIVERSITY, New York, NY  
*Computer Architecture Security Technologies Laboratory*  
Worked with CASTL lab to develop hardware-based defenses for practical attacks. Currently working on using system architecture to measure the overheads of security at runtime.
- 2014–2018 | Research Assistant, BRIGHAM YOUNG UNIVERSITY, Provo Utah  
*Configurable Computing Laboratory*  
Conducted research on FPGA security. Worked with a small team of graduate students and professors on the problem of third-party IP assurance. Previous research work includes assistance in design and setup of experiments on FPGA short circuits.
- 2016 | Engineer, TRASHTALK, Provo, Utah  
Worked at start-up company as lead engineer. Designed and prototyped an IoT device for trash bins. Device measured capacity of trash bins using ultrasound sensors and sent SMS alert when bin was full.

## SKILLS

---

- SOFTWARE:** Proficient in most major programming languages, including C, C++, C#, Java, and Python. Excellent skills in algorithms and data structures.
- HARDWARE:** Experienced with Verilog, SystemVerilog, VHDL, and design verification. Knowledgeable of low-level computing systems and architecture. Strong understanding of reconfigurable computing, especially FPGAs.
- SECURITY:** Experienced in many security disciplines, particularly hardware security, cybersecurity, cryptography, and penetration testing.
- AI:** Experienced at many areas of Artificial Intelligence, including deep learning, machine learning, and game theory.
- TEAMWORK:** Thrives in collaborative environments. Excellent team player. Strong written and verbal skills. Demonstrates leadership.