RONIK BHASKAR

REDACTED • REDACTED • ronikbhaskar.github.io

EDUCATION

University of Chicago, **Chicago, IL**

Bachelor of Science in Computer Science and Mathematics, GPA: 3.96   *Expected June 2024*

- Relevant Coursework: Real Analysis, Linear Algebra, Computer Networks, Computer Security, Machine Learning

HONORS & AWARDS

Hutchins Scholar, University of Chicago, top 10% of students at end of second year	*2022*
Metcalf Fellowship, University of Chicago, Awarded REDACTED stipend for summer research	*2021*
University Scholar Award, University of Chicago, Merit-based scholarship, REDACTED over 4 years	*2020*
Presidential Scholar Semifinalist, U.S. Department of Education, 600 / 3.6 million high school seniors.	*2020*

PUBLICATIONS

Zhuolin Yang, Zain Sarwar, Iris Hwang, **Ronik Bhaskar**, Ben Y. Zhao, Haitao Zheng (2024). Can Virtual Reality Protect Users from Keystroke Inference Attacks? *USENIX Security*, Philadelphia PA.

RESEARCH EXPERIENCE

University of Chicago

Undergraduate Researcher, SAND Lab   *June 2022 – Present*

- Evaluate AI image detectors with a human-curated, adversarially-robust benchmark
- Build and manage a webservice around GLAZE, a tool protecting art styles from AI, serving over 3000 artists with continuous updates and a web-of-trust network
- Analyze handtracking data for modern VR systems, quantifying the near-Gaussian noise and lack of precision during realistic typing events
- Train and evaluate DNNs to test the transferability of keystroke inference attacks in VR
- Engineer methods for reducing detectability in attacks on Cloze and knowledge retrieval tasks for bidirectional text transformers

MIT / Transformative Energy and Materials Capital

Research Intern, Physics Research Department   *January 2022 – May 2022*

- Design simulations of novel models of subatomic particles
- Facilitate communication between our researchers and ML experts at a distributed computing company

Thirty Million Words

Research Intern, Wearable Technology Division   *June 2021 – December 2021*

- Evaluate reliability of new and existing web services, discovering 20+ bugs and a cross-site scripting attack
- Implement and test labeling functions for weak-supervision machine learning models
- Design algorithms to calculate conversation metrics using prior research in cognitive development

TEACHING AND OUTREACH

Instructor, UChicagOrigami   *January 2022 – Present*

- Design and run weekly workshops for arts students and neurodiverse students

TA, Masters C Bootcamp, University of Chicago   *January 2023*

- Design curriculum and answer questions for 30 CS masters students

TA, Foundations of Computer Networks, University of Chicago   *October 2022 – December2020*

- Hold office hours 4 times a week with 15+ students per session, review work done by graders

Tutor, ACT Prep, 72 Tutoring   *June 2020 – December 2020*

- Work with 8+ students 1-on-1 twice a week, modifying curriculum and tracking progress