

# Jonah Rosenblum

Computer Science and Engineering  
University of Michigan

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## Research Interests

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I am interested in building systems that protect data privacy and integrity. My recent work uses trusted hardware technology to protect the sensitive data in genome analytics, and explores code transformations to protect against side-channel attacks. Prior work prevents Rowhammer attacks between VMs by allocating memory that physically isolates VMs across subarray boundaries.

## Education

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### University of Michigan

*Ph.D. in Computer Science and Engineering*  
*Advisor: Satish Narayanasamy*

Ann Arbor, MI  
*Sep 2022-Current*

### University of Michigan

*M.S. in Computer Science and Engineering*

Ann Arbor, MI  
*Jan 2021-Dec 2021*

### University of Michigan

*B.S. in Computer Science*

Ann Arbor, MI  
*Sep 2017-Dec 2020*

## Publications

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1. **Jonah Rosenblum**, Juechu Dong, Satish Narayanasamy. “*SECRET-GWAS: Confidential Computing for Population-Scale GWAS*.” Under submission in Nature Methods.
2. Kevin Loughlin, **Jonah Rosenblum**, Stefan Saroiu, Alec Wolman, Dimitrios Skarlatos, and Baris Kasikci. “*Siloz: Leveraging DRAM Isolation Domains to Prevent Inter-VM Rowhammer*.” In **Symposium on Operating Systems Principles (SOSP)**. 2023.

## Employment

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### Google

*Software Engineering Intern*  
Team: GCloud Infrastructure

Virtual  
*May-August 2021*

Analyzed inversion between network and application priority for high-priority Google traffic across all clusters and identified strategies to align less latency sensitive traffic with appropriate QoS.

### Google

*Software Engineering Intern*  
Team: Cloud Trace

Virtual  
*May-August 2020*

Worked on open-source telemetry tool OpenTelemetry, implementing graceful shutdown for processes to ensure all traces and metrics are exported.

## Teaching

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### **Advanced Operating Systems (EECS 582)**

*Graduate Student Instructor for Prof. Ryan Huang.*

Ann Arbor, MI

*Sep-Dec 2023*

### **Parallel Computer Architecture (EECS 570)**

*Graduate Student Instructor for Prof. Satish Narayanasamy.*

Ann Arbor, MI

*Jan-May 2021*

## Professional Activities

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### **CSEG Security Reading Group Co-Chair**

*Run weekly security group meetings to discuss current research papers.*

Ann Arbor, MI

*Jan 2023-Current*

### **Grad Mentor Program Volunteer**

*Research/grad program mentor to Master's and Ph.D. students.*

Ann Arbor, MI

*Sep 2023-Current*

## Technical Skills

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Programming Languages: Proficient in C, C++, and Python. Familiar with many other object-oriented languages.

Other skills: Kernel development (QEMU/Linux)