

BILL DEMIRKAPI  
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## Education

BS, Computing Security  
*Rochester Institute of Technology* Expected May 2023

## Experience

Application Security Engineer  
Zoom Video Communications August 2020 to Present

- Leading the engineering of red team tooling for assessments as the technical architect and primary contributor.
- Auditing the applications our company uses for security vulnerabilities.

Security Intern  
Zoom Video Communications April 2020 to August 2020

- As a Security Intern, my role focuses on securing the Zoom client by engineering solutions to prevent future vulnerabilities and managing the development of vulnerability patches.

Windows Red Team Engineer  
*RITSEC Red Team* January 2020 to Present

- Designed custom malware used in popular blue team competitions such as RIT's IRSec and Lockdown at the University of Buffalo.

Windows Penetration Testing Lead  
*RIT Collegiate Penetration Testing Competition* September 2019 to November 2019

- Led offensive Windows penetration testing operations as part of RIT's team for the Collegiate Penetration Testing Competition.

Software Engineering Intern  
*CrowdStrike* June 2019 to August 2019

- Developed anti-tamper solutions for core parts of the CrowdStrike Falcon sensor under the Strategic Research Initiatives team.

Security Integration Engineer High School Intern  
*IBM Resilient* June 2018 to August 2018

- Integrated security products with the Resilient incident response platform.

## Conference Talks

DEF CON 28 – Demystifying Modern Windows Rootkits August 2020

Black Hat USA 2020 – Demystifying Modern Windows Rootkits August 2020

DEF CON 27 – Are Your Child's Records at Risk? The Current State of School Infosec August 2019

RECon Montreal 2019 – The Unseen Dangers of Bloatware June 2019

## Research Publications

Defeating Macro Document Static Analysis with Pictures of My Cat [bit.ly/35ETXKR](https://bit.ly/35ETXKR)

How to use Trend Micro's Rootkit Remover to Install a Rootkit [bit.ly/3caDZ](https://bit.ly/3caDZ)

Several Critical Vulnerabilities on most HP machines running Windows [bit.ly/2RyNZ6j](https://bit.ly/2RyNZ6j)

Insecure by Design: Weaponizing Windows against User-Mode Anti-Cheats [bit.ly/2r1RNbj](https://bit.ly/2r1RNbj)

Remote Code Execution in Lenovo Service Bridge

Local Privilege Escalation in all Dell machines via pre-installed software [bit.ly/2kR0fBS](https://bit.ly/2kR0fBS)

Improper Access Control in Admissions Software allowing students to accept themselves [bit.ly/2Kh3GO8](https://bit.ly/2Kh3GO8)

Arbitrary physical memory access in Carbon Black endpoint software [bit.ly/2lYKjOs](https://bit.ly/2lYKjOs)

Remote Code Execution in all Dell machines via pre-installed software [bit.ly/2PGTLuf](https://bit.ly/2PGTLuf)