

Karthik Ramakrishnan

SECURITY RESEARCHER

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Education

Georgia Institute of Technology

PHD IN COMPUTER SCIENCE

Advisor: [Prof. Frank Li](#)

Area of Research: Web security, privacy and Internet measurement

Atlanta, U.S.A

Transitioning in Summer 2024

Georgia Institute of Technology

MASTERS IN CYBERSECURITY - CYBERSECURITY AND PRIVACY

Advisor: [Prof. Frank Li](#)

Area of Research: Web security, privacy and Internet measurement

Atlanta, U.S.A

May 2024

Manipal Institute of Technology

BTECH ELECTRONICS AND COMMUNICATION ENGINEERING WITH A MINOR IN COMPUTING

Manipal, India

July 2024

Work / Research Experience

Georgia Institute of Technology

GRADUATE STUDENT RESEARCHER

Working on investigating unintentional web API accesses in the wild.

Worked on the empirical measurement of privacy leakage in in-app mobile application browsers.

Atlanta, U.S.A

August 2022 - Present

CISPA Helmholtz Center for Information Security

RESEARCH INTERN

Worked on investigating inconsistencies in HTTP Header parsing advised by [Ben Stock](#).

Saarbrücken, Germany

June 2023 - August 2023

IMDEA Software Institute

RESEARCH INTERN (BACHELOR THESIS)

Worked on design, development, and evaluation of a framework for analyzing browser fingerprinting techniques and their countermeasures using Chrome Devtools Protocol as part of my bachelor thesis advised by [Dr. Juan Caballero](#) and [Dr. Srdjan Matic](#).

Madrid, Spain

February 2022 - July 2022

Global Cybersecurity Institute (Rochester Institute of Technology)

CYBERSECURITY VISITING RESEARCHER

Worked with [Prof. Justin Pelletier](#) and [Prof. Bill Stackpole](#) to develop a custom deployable production HoneyPot with Visualisation Dashboard and was involved in developing an incident response training curriculum for executives and the tech team of companies. Presented the research output at the CyberVSR Symposium 2021.

Rochester, U.S.A

May 2021 - August 2021

C3i Center, Indian Institute of Technology Kanpur

RESEARCH INTERN (VULNERABILITY ASSESSMENT AND PENETRATION TESTING)

Worked on developing a web application framework to automate the recon process by building a pipeline that makes use of a combination of open-source tools and scripts to gather information about the target Web Application created using the Python Django Framework, with HTML, CSS and Vanilla JS as the frontend, styled using Bootstrap 5 library and MongoDB as the database to store the results. The application is targeted at penetration testers who can save a massive amount of time by running scans and viewing the results on the go with complete customisation with just a couple of clicks and a user-friendly interface rather than the traditional CLI based approach.

Kanpur, India

May 2021 - July 2021

Research Publications

Dhruv Kuchhal, [Karthik Ramakrishnan](#), and [Frank Li](#). Whatcha Lookin' At: Investigating Third-Party Web Content in Popular Android Apps.

Currently under review

[Karthik Ramakrishnan](#), [Gokul P](#), & [Rohan Nigam](#). (2021). Pandora: An Intrusion Detection HoneyPot with Real-time Monitoring accepted for presentation at International Conference on Forensics Analytics Big Data and Security (IEEE FABS 2021)

Honors & Awards

- 2023 **NDSS Symposium 2023 Student Support Award**, Awarded to 17 students out of 80+ applicants
- 2021 **Cybersecurity Visiting Student Research (CyberVSR) Scholar**, Rochester Institute of Technology
- 2020 **National Finalist(Top 150)**, InCTF 2020 Capture The Flag(CTF) Competition
- 2019 **Tea with Director Special Award**, Manipal Institute of Technology (for outstanding extracurricular achievements)
- 2018 **Linux Foundation Training Scholar**, Awarded by Linux Foundation for contributions towards open-source
- 2018 **Leangap Scholar**, Selected among 40 High school students from across the world to attend Entrepreneurship bootcamp in San Francisco, U.S.A
- 2017 **Finalist**, INSEF Regional Science Fair
- 2017 **Student of the Year**, Awarded by USA UnivQuest for outstanding extracurricular activities
- 2016 **Finalist(Top 500 Startups and Groups)**, Hello Tomorrow Entrepreneurship Challenge
- 2016 **Finalist**, Esya Entrepreneurship Pitch Competition, IIIT Delhi
- 2016 **Winner**, InoVIT Science Fair (Project Showcase Category)
- 2015 **Finalist**, INSEF Regional Fair
- 2015 **National Finalist (Top 100)**, Intel IRIS Science Fair
- 2015 **Regional Finalist (Top 90 across the world)**, Google Science Fair
- 2015 **Finalist**, InoVIT Science Fair (Model Making Category)

Skills

Languages: Python, JavaScript(ES6), HTML, CSS/Sass, Bash \LaTeX

Software/Libraries: Flask, Django, Node.js

Cybersecurity tools: Burp Suite, Nessus, NMAP, MITM Proxy, Wireshark, Metasploit Framework