Karthik Ramakrishnan

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Education

Georgia Institute of Technology

Atlanta, U.S.A

PHD IN COMPUTER SCIENCE Expected May 2027

Advisor: Prof. Frank Li

Area of Research: Web security, privacy and Internet measurement

Georgia Institute of Technology Atlanta, U.S.A

MASTERS IN CYBERSECURITY - CYBERSECURITY AND PRIVACY May 2024

Advisor: Prof. Frank Li

RESEARCH INTERN

Area of Research: Web security, privacy and Internet measurement

Manipal Institute of Technology Manipal, India

BTECH ELECTRONICS AND COMMUNICATION ENGINEERING WITH A MINOR IN COMPUTING

Work / Research Experience

Georgia Institute of Technology

Atlanta U.S.A.

GRADUATE STUDENT RESEARCHER August 2022 - Present

Working on investigating unintentional web API accesses in the wild.

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

CISPA Helmholtz Center for Information Security

Saarbrücken, Germany June 2023 - August 2023

Worked on investigating inconsistencies in HTTP Header parsing advised by Ben Stock.

IMDEA Software Institute Madrid, Spain RESEARCH INTERN (BACHELOR THESIS) February 2022 - July 2022

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.

Global Cybersecurity Institute (Rochester Institute of Technology)

Rochester, U.S.A

CYBERSECURITY VISITING RESEARCHER

May 2021 - August 2021

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.

C3i Center, Indian Institute of Technology Kanpur

Kanpur, India

RESEARCH INTERN (VULNERABILITY ASSESSMENT AND PENETRATION TESTING)

May 2021 - July 2021

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.

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 Realtime 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 LTEX

Software/Libraries: Flask, Django, Node.js, Docker, MongoDB

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