Ravi Prakash [Tripathi]

📞 +91 88104 50433 | ✉ 1907prakash.ravi@gmail.com | 🌐 ravi-prakash1907.gitlab.io

WORK / INTERNSHIP

Technical Intern (Research)
JAN 2024 - Present | Siemens Technology and Services Pvt. Ltd.
Working on a multi-domain authentication problem.
➔ Exploring various authentication methods and scope of improvement.
➔ **Tools/Skills:** Literature Analysis, Deep Learning, Python

Teaching Assistant [*link*]
MAR 2023 - JUN 2023 | Digital University Kerala | M.Sc. Cyber Security
Modern Cryptography (Lab), Spring 2023 (M3022201)

Blockchain (Security Research) Intern [*project*]
FEB 2022 - JUN 2022 | Kerala Blockchain Academy | Certificate
Worked on Blockchain Attacks & Security under supervision of Sr. researchers.
➔ Analyzed Bitcoin/Ethereum/Hyperledger vulnerabilities from CVEs
➔ **Tools/Skills:** Topic Modeling, Machine Learning, Blockchains, Python

Penetration Testing Intern
OCT 2021 - DEC 2021 | Virtually Testing Foundation | Badge
Worked on OWASP Top-10 vulnerabilities and prepared 10+ pen-testing reports.
➔ Completed a CTF challenge successfully
➔ **Tools/Skills:** Pentesting, BurpSuite, Wireshark, SQLmap, Metasploit, Netcat.

Content Analyst
JUN 2020 - OCT 2020 | The Data Tribune
Worked with the core team for data analytics & SEO in the early initial phase.
➔ Build NLP models and real-time data processing solutions.
➔ **Tools/Skills:** Data Science, Social Media Analytics, Insight Building, SEO, R

PUBLICATION / RESEARCH   *(3+ years)*

➔ **Prakash, R.,** Nayar, G.R., Thomas, T. (2023) Security Risk Assessment of Metaverse Based Healthcare Systems Based on Common Vulnerabilities and Exposures (CVE), IEEE International Conference in Recent Advances in Systems Science and Engineering (RASSE)

➔ Sharma, A., Dutta, M., **Prakash, R.** (2023) Comparative Performance Analysis of ML Algorithms for COVID-19 in India, International Conference on Artificial Intelligence of Things (ICAIoT). (Session's Best Paper)

➔ **Prakash, R.,** Anoop, V.S, Asharaf, S. (2022) Blockchain technology for cybersecurity: A text mining literature analysis. International Journal of Information Management Data Insights. Volume 2, Issue 2. **[Q1]**

SKILLS

Programming, Scripting & Markup Languages:

Python, R, C/C++, JavaScript, A-frame, Java, PHP, Golang, Prolog, Assembly x86, Shell Scripting *(bash)*, HTML, CSS, LaTeX

Version Control & Others:

Git, SQL, Biometrics, Nmap, BurpSuite, Cryptography, NLP, Blockchains, Docker, Metasploit, Google Clouds, Linux, Data Structures & OOPs, AI/ML, Data Science, Adobe Suite, WordPress

ATTRIBUTES

- Good Communication
- Fast Learning
- Time Management
- Critical Thinking & Problem Solving
- Teamwork & Leadership

HOBBIES

- Open Source Projects
- Attending tech meetups
- Photo Editing & Podcasts
- Blogging & Public Speaking
- Poetry & Philosophy

→ <u>Prakash, R.</u>, Thomas, S.S. (2022) Asymmetric Encryption Techniques for Data Embedding and Authentication in Fingerprints Using Eigen Space Based Modelling. *(M.Sc. Thesis)*

→ Vashisht, G., <u>Prakash, R.</u> (2020) Predicting the Rate of Growth of the Novel CoronaVirus 2020. International Journal on Emerging Technologies (IJET). Volume 11, Issue 2.

EDUCATION

Digital University Kerala, Trivandrum   **NOV 2022 - PRESENT**
Ph.D. Computer Science (Immersive Technologies)

IIITM-Kerala, Trivandrum   **OCT 2020 - JUL 2022**
M.Sc. Computer Science (Cybersecurity Major – Research Based)   **9.26 GPA**

University of Delhi, New Delhi   **JUL 2017 - AUG 2020**
B.Sc. Hons. Computer Science (First Division – Research Based)   **7.97 CGPA**

Jawahar Navodaya Vidyalaya (Fbd.), Haryana   **AUG 2013 - APR 2017**
10th & 12th Grade (99% in Computer Science)   **88%**

PROJECTS

→ **dyPixa** *(link)*
Maintained during **Hacktoberfest-10** | Aimed to dynamically generate abstract images using Computer Vision, ML, and Sentiment Analysis.

→ **custom-kali-linux** *(link)*
A collection of **customized Kali Linux images** for various cybersecurity security professionals (built on **Docker**).

→ **SecureAuth-SA** *(link)*
A highly secure authentication system consists of a **novel cryptographic mechanism**

→ **CaterApp** *(link)*
A TCP-based **files sharing utility** that can be accessed via bash terminal. It can also encrypt files before transmitting, ensuring a secure transfer.

→ **Secret-Box** *(link)*
A **secure task manager** application developed with Python, SQLAlchemy, Flask, Docker, HTML, CSS & JavaScript.

→ **Chat-Secure** *(link)*
A TCP-based end-to-end chat-room application available with CLI and GUI interfaces.

AWARDS AND RECOGNITION

→ **Qualified** for **CSI InApp Award** (Round-1)
APR 2022 | by Computer Society of India (CSI) | AI/ML, Biometrics & Cryptography

→ **GATE Qualified**
2023 - 2026 | **92.85**[th] *(percentile)* | Subject: CSE

→ **Bug reported** in **IIITM-K Live (moodle) Server**
JAN 2021 | Download Restricted Slides

CO-CURRICULAR *(recent)*

– **Peer Learning lead** at **Innovation Club,** DUK

– Founder of **HackClub-DUK** Affiliated with HackClub (now **Hack-X**)
(SEP 2021 –Present)

ADDITIONAL ROLE

– Co-founder of Jijeevisha (NGO)

PORTFOLIO WEBSITE

I'm up for any new metaverse, XR or cyber security project.
(contact links on portfolio)

ravi-prakash1907.gitlab.io

→ **Outstanding performance** during **M.Sc. Degree**
  OCT 2020 - JUL 2022 | **Topper** | 10 CGPA in Sem-4

→ **Second** position in **the Advance Category of** NetScout Cyberathon
  MAY 2022 | **Won $500** | Developed an Authentication Tool

→ **Organizer** of Encrypt-CTF
  APR 2019 | Research & Development Team | University of Delhi

→ **Other Achievements/Participations**
  ○ Multiple **Coursera** certification in **Cybersecurity, Data Science, and XR.**
  ○ **NCC** (National Cadet Corps) A-Certificate
  ○ Actively participating in GDG and DefCon (Trivandrum) meetups

LANGUAGES

Hindi (native),

English (C1 Proficiency, DET 135),

Urdu (basic)