Vishvesh Rao

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■ PROFILE

Passionate about cyber security and especially focus in the field of cryptography and Reverse engineering. Actively try to improve skills in security by playing and learning from CTF's as a part of Team bi0s \square . Also seek to contribute to the open source community.

EDUCATION

B.Tech in Computer Science and Engineering, Amrita Vishwa Vidyapeetham

2019 - 2023 | Kollam, Kerala, india

ROLL NO: AMENU4CSE19161

CGPA: 8.9/10

CBSE AISSCE, Navy Children school

2017 - 2019 | Kochi, India

Boards, Percentage obtained: 95.6%

2016 - 2017 | Delhi, India

CBSE AISSE, Navy Children school CGPA: 10/10

EXPERIENCE

Inctf Nationals, Speaker, Organiser, Student mentor

2021 - present

Hacking & Cyber Security contest organized by team bi0s, in association with Amrita Vishwa Vidyapeetham and Amrita Centre for Cyber Security. Gave a talk on security of JWT with, emphasise crypto-related JSON vulnerabilities, forging tokens and manipulating key-value pairs present in jwt to verify tokens. Created ctf style challenges and mentored students familiarising them with security concepts.

Member, Team biOs, Cryptanalyst/Reverse engineer

2019 - present

Team bi0s is the no. 1 ranked CTF team in India. An active member of the team focusing primarily on Cryptography/ Block chain security and related concepts and also do reverse engineering occasionally. Also in-charge of organising events hosted by our club.

Inctf Junior, Event lead, Challenge creator, Challenge auditor

12/2020

InCTF Junior is India's First & Premier Hacking & Cyber Security Contest for High School Students, organised by team bi0s. Assigned as the overall events technical lead and in-charge of the Crypto category, responsibilities included creating challenges, auditing challenges of other creators, and challenge deployment/hosting and monitoring the ctf infrastructure.

PROJECTS

Traboda, Cybersecurity Startup

2020 - present

Designed security challenges for Traboda, an ed-tech startup providing innovative & scalable solutions for tackling cybersecurity threats. Lead content creator- Produced content related to cybersecurity topics for traboda academy ② and for bi0s wiki ② . Developed challenges based on RSA attcaks, Number theory, matrix algebra, repeated xor, homomorphic encryption, modified Diffie-hellman key exchange.

House Price Prediction, ML, Data science ☑

11/2021

An ML model for the purpose of predicting house prices. Extensive feature scaling has been done, missing values filled by using SGDC classifier. Refined dataset was trained on 3 separate algorithms: KNR, Random forest, Linear regression. All 3 models accuracy were evaluated and random forest gave the best accuracy of the 3 with a r-square score of 76%.

YtoMP3, telegram conversion bot 🖂

06/2021

Simple video search bot for telegram that lets the user search for videos on you tube via inline command. Users can take full advantage of telegrams unlimited free storage and built in mp3 player without having to worry about backing up songs or loosing them also comes with support for mp4 format too.

Software company data entry system, Java, DBMS

11/2020

An implementation of a software company employee management system with numerous functionalities. Back end implemented in sql and front end created with java swing using JDBC to connect back end to front end. link to Project Documentation

TECHNICAL ACHIEVEMENTS

Runners up in Securinets CTF Quals 2021, team bi0s

2021

Acquired 2nd place internationally and qualified for finals

CSAW CTF Qualifiers/finals, NYU / IITK

2021

Ranked 11 internationally and 1st in India in qualifiers and 3rd in finals conducted by NYU and Indian Institute of Technology, kanpur

3rd rank WPICTF 2021, team bi0s

2021

Acquired 3rd position internationally in CTF conducted by WPICSC

Black Hat USA 2021, Mandalay Bay, Las Vegas

2021

Awarded Student scholarship (1195\$) to attend Black Hat USA 21 held in Las Vegas

Volga CTF 2021 , team bi0s Qualified for Volga CTF 2021 finals to be held in Samara,Russia	2021
2nd ISFCR Hackathon 2021, team bi0s Acquired 2nd place internationally	2021
Black Hat Asia 2021 Awarded Student scholarship (500\$) to attend Black Hat Asia 21	2021
1st IJCTF 2020 , team bi0s Acquired 1st place internationally in CTF organized by warlock_rootx	2020
Black Hat Asia 2020 Awarded Student scholarship (500\$) to attend Black Hat Asia 2020	2020
2nd Runners up in CSAW CTF Nationals , <i>team bi0s</i> Ranked 2nd nationally in finals of CSAW organized by NYU Centre for Cyber Security, New York	2020
Runners up in Byte Bandits CTF, team bi0s 2nd position in CTF organized by IIT Indore	2020
1st place DarkCTF 2020, team bi0s Played with the crypto team and won first place internationally	2020

(*) TECHNICAL SKILLS

 $\begin{array}{l} \textbf{Languages} \\ \textbf{python, C, C++, Java, x86 assembly, solidity, intel 8085,} \end{array}$ Markdown, LaTeX

Tools

 $Docker,\,Git,\,VS\,\,Code,\,gdb\hbox{-} gef,\,Wireshark$

Computer Architectures

MIPS, intel 8085, ARM, intel x86

Frameworks

Z3, Sagemath, Flask, Ghidra, IDA

Platforms

GNU/Linux, Windows

ONLINE PROFILES

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• Twitter: The $_$ Str1d3r \boxdot