

Venkkatesh Sekar

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EDUCATION

NIT, TRICHY (NITT)

B. TECH IN COMPUTER

SCIENCE AND ENGINEERING

Expected May 2018 | Trichy, India

Cum. GPA: 8.42

SHRISHTI VIDYASHRAM

Grad. May 2014 | Vellore, India

Graduating Percentage: 95%

LINKS

GitHub:// [Venkkatesh Sekar](#)

Medium:// [Venkkatesh Sekar](#)

LinkedIn:// [Venkkatesh Sekar](#)

INTERESTS

System Security

Networking

Ethical Hacking

Cryptography

Kernel Development

COURSEWORK

UNDERGRADUATE

Computer Networks

Probability Theory

Combinatorics and Graph Theory

Computer Architecture

Internetworking Protocols

Database Management Systems

Operating Systems

Algorithms & Data Structures

Mobile Computing

Discrete Structures

Automata and Formal Languages

INDEPENDENT

MIT 6.858 Computer Systems Security

MIT 6.006 Introduction to Algorithms

Cryptography and Network Security

SKILLS

PROGRAMMING

• C++ • Python • Shell

• Ruby • Javascript • HTML/CSS

NETWORKING

• NS2 • Wireshark • Fiddler

SERVERS

• Apache • Nginx • YAWS

FAMILIAR

• SQL • gdb • Rails • Java

RESEARCH

A DYNAMIC APPROACH TO TREE BASED HASHING

Designed a neoteric method of hash construction by computing hash-tree attributes dynamically to maximize efficiency in SHA3. The tree model adapts Sakura method and parallel processing is used to improve speed. The research is currently extended to take into account the number of processor cores used.

A NOVEL APPROACH TO LINK FARM THREAT DETECTION

Conceptualized and designed a threat detection model to detect link farms which uses Black Hat Search Engine Optimization to deceive PageRank's optimum solution. The research thesis is currently ongoing under the guidance of **Prof S.Selvakumar**

EXPERIENCE

DELTA CTF GROUP | MEMBER

February 2016 – Present | NIT-Trichy, India

- Group of hackers taking part in various Capture the Flag events like Build the Shield - Microsoft, Google-CTF, Boston Key Party, ASIS, InCTF.
- Worked on security projects in areas like Web Exploits and Steganography. Actively eradicated many vulnerabilities and backdoors in the college network.

DELTA FORCE | SOFTWARE DEVELOPER + SYSTEM ADMINISTRATOR.

July 2015 – Present | NIT-Trichy, India

- Member of college's computing and programming club & college webteam.
- Developed and maintained the college site, tech-fests and Intranet sites.

DIPPER | SOFTWARE ENGINEERING INTERN

November 2015 – December 2015 | Delhi, India

- Developed a Global Navigation Satellite System (GNSS) based truck tracking system to support freight logistics between different Metropolitans of India.
- Built an API to populate custom Geofences, Points of Interest and compute real-time pit stops and routes to minimize travel cost.

OPEN SOURCE

VOICE-TUTOR July 2016 | github.com/thakkarparth007/voice_tutor

- Call based tutor capable of delivering audio lessons, progress tracking and clearing doubts. Supports English and Hindi.

BLOCKHASH Dec 2015 – Present | github.com/Spockuto/blockhash

- Multi-threaded SHA for large files optimizing the speed by over 50%.

FIX CLIENT Sep 2015

- Built an module to make fast and secure stock transactions using FIX protocol.
- Developed the module for a startup focussed in Netherlands.

AWARDS

2016 2nd

2016 Finalist

2016 223rd

2015 Linux Essentials

2014 1st

2011 4th

2006 1st

InOut, India's largest student based Hackathon, NIT Surat.

Capture the Flag, Microsoft Build theShield

Google Capture the Flag worldwide

Linux Professional Institute, Toronto, Ontario, Canada

Mathematical Quiz, VIT

6th National Interactive Maths Olympiad, Eduheal Foundation

Japanese Soroban Mental Maths National Competition