

# 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. SHA3 used adapts Sakura method and parallel processing.

### A NOVEL APPROACH TO LINK FARM THREAT DETECTION

Conceptualized and designed a threat detection model to detect link farms using Black Hat SEO to deceive PageRank's optimum solution. The research thesis is being done under the guidance of **Prof S.Selvakumar**

## EXPERIENCE

### DELTA CTF GROUP | MEMBER

February 2016 – Present | NIT-Trichy, IN

- Group of hackers taking part in various CTF's like BTS, G-CTF, 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 + SYS AD.

July 2015 – Present | NIT-Trichy, IN

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

### DIPPER | SOFTWARE ENGINEERING INTERN

November 2015 – December 2015 | Delhi, IN

- Developed a GNSS truck tracking system to support freight logistics.
- 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](https://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](https://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 InOut, NIT Surat.

2016 Finalist CTF, Microsoft Build theShield

2016 223rd Google Capture the Flag worldwide

2014 1st Mathematical Quiz, VIT

2011 4th 6th National Interactive Maths Olympiad, Eduheal Foundation

## CERIFICATIONS

2015 LPI Linux Essentials Linux Professional Institute, Toronto, Ontario, Canada