# 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

Operating Systems
Algorithms
Data Structures
Computer Networks
Automata and Formal Languages
Combinatorics and Graph Theory
Computer Architecture
Internetworking Protocols
Database Management Systems
Mobile Computing
Discrete Structures
Digital System Design

#### **INDEPENDENT**

MIT 6.858 Computer Systems Security MIT 6.006 Introduction to Algorithms

# SKILLS

### **PROGRAMMING**

- C++ Pvthon Shell
- Ruby Javascript HTML/CSS

#### **NETWORKING**

• NS2 • Wireshark • Fiddler

#### **SERVERS**

• Apache • Nginx • YAWS

#### **FAMILIAR**

• SQL • gdb • Rails

## RESEARCH

#### A DYNAMIC APPROACH TO TREE BASED HASHING

Designed a neoteric method of hash construction by computating 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 decive 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

• 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 2014

- 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