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
Proability 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 computating 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 decive 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

Year	Result	Event
2016	2nd	InOut, India's largest student based Hackathon, NIT Surat.
2016	Finalist	Capture the Flag, Microsoft Build theShield
2016	223rd	Google Capture the Flag worldwide
2015	Linux Essentials	Linux Professional Institute, Toronto, Ontario, Canada
2014	1st	Mathematical Quiz, VIT
2011	4th	6th National Interactive Maths Olympiad, Eduheal Foundation
2006	1st	Japanese Soroban Mental Maths National Competition