

Nagendra Posani

950 Marietta Street – Atlanta, GA - 30318

+1-470-447-3818

nagendra@gatech.edu

in posaninagendra

posaninagendra

Education

Georgia Institute of Technology

MS in Information Security

Expecting Dec'2017

GPA: 3.87

Dhirubhai Ambani Institute of ICT

Bachelor of Technology in ICT

2011–2015

GPA: 9.19/10

Publications

- o *Automatic Generation of Compact Alphanumeric Shellcodes for x86*, ICISS 2014, LNCS 8880, pp. 399 - 410.
- o *Alphanumeric Shellcode Generator for ARM Architecture* SPACE 2013, LNCS 8204, pp. 38 - 39.

Experience

VMWare

iOS SDK Intern,

Atlanta

May'17–Aug'17

Developed iOS frameworks of implementation of security features in the core SDK. The frameworks include implementing mobile Single Sign-On using OAuth 2.0 protocol to replace existing SAML authentication of the console and Encrypted Core Data framework to provide encryption functionality to the persistent store to secure app level data on iOS devices.

Kuliza Technologies Pvt. Ltd.

iOS Developer,

Bangalore

Jan'15–July'16

I developed 12 iOS applications for iPhone and Apple Watch, developed in Objective-C & Swift-2. My responsibilities include writing clean modular code, researching and implementing iOS development patterns and paradigms to increase efficiency and reduce app's resources.

Technical Projects

Initmem: Eliminating Uninitialized-Use Vulnerabilities in System Software

Guide: Prof. Taesoo Kim

Team of 2

Jan'17–Apr'17

Implemented a GCC plug-in to eliminate vulnerabilities related to uninitialized use of memory locations for GCC compiled languages. ([link](#))

Distributed Web Crawler Using Spark

Guide: Prof. Ling Liu

Team of 3

Feb'17–Apr'17

Proposed a modification of the partitioning algorithm of the Sparkler, a distributed crawler using Spark. The new partitioning algorithm outperforms the crawler.

Elastic Search Swift Client Library

Guide: Siddharth, CEO at AppBase

Team of 2

Feb'17–Apr'17

We are developing swift client library for Elastic Search. There are no existing libraries for iOS development, it is an open source project to create an interface to communicate with the Elastic Search cluster.

Malicious Data Discovery for Alexa Top 1M Sites

Guide: Prof. Manos Antonakakis

Team of 6

Aug'16–Dec'16

We crawl the Alexa top 1M websites for a month and analyzed the data for malicious data by performing HTML DOM analysis, JS static & dynamic analysis using machine learning for clustering and identifying the malicious websites.

Multicasting in Delay Tolerant Networks

Guide: Prof. Mostafa Ammar

Team of 5

Aug'16–Dec'16

We implemented multicasting in Delay Tolerant Networks (DTN) in ONE simulator, which is a class of emerging networks which experience frequent and long duration partitions. Improved performance of the message delivery by 60% using PROPHET.

Database Security: Survey on Searchable Encryption

Guide: Prof. Sasha Boldyreva

Team of 2

Aug'16–Dec'16

We did a survey on Database Security namely Searchable Encryptions like Order Preserving, Order Revealing and Partial Order Preserving Encryptions. Analysed their current standards, attacks and there safety measures.

Hardened Password System

Guide: Prof. Mustaque Ahamad

Team of 2

Aug'16–Dec'16

We increased the entropy of attack work factor of regular password based authentication system by including the keystroke dynamics without storing the password on the system. We increased the entropy of the password authentication system by length of password.

Skills

Programming: Python, Swift, C++, Go, C, Javascript, JAVA, D3.js, Scala, Objective-C, MySQL, HTML, CSS

Technologies: Hadoop, Spark, Mapreduce, SQLite, AWS, Microsoft Azure

Relevant Course Work: Data & Visual Analytics, Machine Learning, Network Security, Adv. Internet Computing, Computer Networks, Applied Cryptography, Intro. Information Security, Secure Computer Systems.

Achievements

- o *VMWare Spotlight Award* - for being focused and passionate about completing the projects.
- o *University Best Student Award - Gold Medal* from TCS for overall academic excellency in engineering.
- o *Fellow of Summer Research Fellowship-2014* of Indian Academy of Sciences.
- o *IET-India Scholarship Award, West Zone Winner 2013.* (Awarded to top 5 students across India)