

RESUME | ADITHYA BHAT

CONTACT: dth.bht@gmail.com | <http://adithyak.me>

EDUCATION

B. Tech 2014–Present National Institute of Technology, Karnataka
CGPA: 9.49/10.0 (Rank #3/101) · *Information Technology* · Currently pursuing B. Tech in the department of Information Technology in NITK Surathkal.

WORK EXPERIENCE

Cloud Data Security using block chains August 2017–Present Research Intern, INDIAN STATISTICAL INSTITUTE
Working on secure cloud data storage using block chains which is publicly verifiable by peers on the block chain.

ElasticSearch, LevelDB and GSON Summer 2017 Software Analyst Intern, MORGAN STANLEY, BANGALORE
Implemented an ElasticSearch Indexing mechanism by using Google's GSON library for a LevelDB cache used by the Instrument Repository.

Indian Academy of Science - Summer Research Fellowship Summer 2016 Intern, INDIAN INSTITUTE OF SCIENCE — Bangalore
A cryptography based analysis project titled “Comparison and bench-marking of generic group order methods for factoring bicomposites and tricomposites” under Dr.CE Veni Madhavan.
Attended talks on basics of **Number Theory, Cryptography, Machine learning, Natural Language Processing, Neural Networks** and **Deep Learning** by research scholars and Professors.

PROJECTS

High Performance Computer Architecture Jan 2017 - April 2017 Analysis of memory management overheads in Linux
An analysis of the memory usage and CPU resources consumed by memory management operations in the linux kernel for virtual memory management, demand paging and page caching mechanisms. A holistic mechanism to benchmark IO in systems considering the software aspects and the hardware aspects in comparison to an ideal system. **Paper is being edited for review**

File System Development July 2016 - Ongoing K-Rack: Metadata encrypted File System
A new high performance Linux USB file system was developed with encryption of metadata of the disk(inode table, block descriptor table and directory inode) and simple XOR of data blocks with a random block. This method leads to improved performance for large data stores. **Paper undergoing review**

OTHER PROJECTS

1. Smart device ecosystem with Smart Mirror employing novel smart device design(**Paper is being edited for review**)
2. News Timeline Generation (**Paper is being edited for review**) [Algorithms]
3. An Integer Factoring Tool based on GMP-ECM [Cryptography]
4. An online code judge with linker lock for sandboxing [Web Development, Security]

5. Android Malware Detection using Deep Learning [Security, Machine Learning, Android Automation, Operating Systems]
6. Semantic RDF Graph generator for Plain Text Sentences [Algorithms]
7. fMRI Analysis using General Linear Model [Algorithms]
8. GPU vs CPU FFT overhead analysis [Operating Systems, Computer Architecture, High Performance Computing]
9. CAPTCHA generator tool using OpenCV [Image Processing, Security]
10. Multiplayer Augmented Reality Air Hockey using PyGame [Networking, Image Processing]
11. Research paper implementation of *Implementation of 20 years of attacks on RSA* by Dan Boneh [Cryptography]

Strengths C, BASH, Python, Java and Git

Languages NASM, R, MySQL, Javascript, Markup Languages (HTML, XML and CSS)

Technologies Django, Elasticsearch, LevelDB, Xen, L^AT_EX

OTHER INFORMATION

Achievements

- 2017 · Admin and Maintainer of the IEEE [Blog](#)
- 2017 · Chariman of the IEEE Computer Society in NITK
- 2016 · Received Indian Academy of Science Summer Fellowship
- 2015 · Executive member of IEEE NITK Chapter - Computer Society
- 2012 · Secured third position in the zonal TCS Rural IT quiz
- 2011 · Visited Hutchesons Grammar School in Glasgow, Scotland, UK as a part of the student exchange programme funded by the British Council.

October 11, 2017