

Adithya Bhat

Final year undergraduate student

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EDUCATION

NIT SURATHKAL

B.TECH IN INFORMATION

TECHNOLOGY

Expected May 2018 | Karnataka, India

Cum. GPA: 9.49/10.0

LINKS

Github:// [adithyabhatkajake](#)

LinkedIn:// [adithyabhatkajake](#)

PUBLICATIONS

K-rack: A lightweight and secure metadata encrypted filesystem

Under review in USENIX FAST 18

Smart Device Ecosystems with smart mirror

Under review in IEEE Internet of Things Journal

A Gravity based Algorithm for News Timeline Generation in Recommender Systems

Drafting

Spacewallet: Publicly verifiable cloud storage using blockchain

Drafting

A Unified I/O Benchmarking Scheme

Drafting

SKILLS

PROGRAMMING

Over 5000 lines:

Python • BASH • C •

Over 1000 lines:

Java • Web (HTML / CSS / Javascript + Django)

Familiar:

Assembly • CUDA • Kernel Programming

RESEARCH

INFORMATICS AND SECURITY LAB | SUMMER RESEARCH FELLOW

May 2016 - July 2016 | Indian Institute of Science, Bangalore, India

Worked with Prof. C E Veni Madhavan to analyze, design, develop and optimize a multi stage factoring framework to factor the numbers generated by GGNFS in the sieving phase.

R C BOSE CENTER FOR CRYPTOLOGY AND SECURITY

| UNDERGRADUATE RESEARCH FELLOW

July 2017 - Dec 2017 | Indian Statistical Institute, Kolkata

Worked with Dr. Sushmitha Ruj to build a publicly verifiable cloud storage using the ethereum framework. The work is currently being drafted for submission in a journal.

PROFESSIONAL EXPERIENCE

MORGAN STANLEY | SOFTWARE ANALYST INTERN

May 2017 - July 2017 | Bangalore, India

- Developed an Elasticsearch framework alongside a levelDB setup to analyze and visualize the levelDB cache

PROJECTS

- 2017 Cloud Data Storage using Ethereum Framework
- 2017 Analysis of Memory Management overheads in the Linux Kernel
- 2017 K-Rack: A lightweight and secure metadata encrypted filesystem
- 2017 Smart Device Ecosystem using a Smart Mirror
- 2017 News Timeline Generation using a novel physics based approach
- 2017 Kompile: A lightweight online code judge
- 2017 Deep4MalDroid: Android Malware detection using Deep Learning
- 2017 TextWalker: An RDF graph generator from natural language
- 2017 fMRI analysis using General Linear Model
- 2017 Fast Fourier Transform: A comparative analysis using GPU and CPU
- 2017 Pikcha: A CAPTCHA generating tool
- 2017 Implementation of Spiking Neural Networks
- 2016 Air Hockey: An augmented reality based multiplayer air hockey game by using real objects to track the mallet.
- 2016 Daedalus: A tool implementing the attacks on RSA as proposed in Dan Boneh's survey paper *20 years of attacks on RSA*
- 2016 A modified implementation of bloom filters
- 2016 A stateful HTTP server built using python
- 2015 MStream: A synchronized RTSP based media player
- 2015 XChat: A chat application with advanced features such as customizable settings, chat profiles and drag and drop for media transfers
- 2015 A modified implementation of SHA2

INTERESTS

Distributed System Architectures
Cloud computing and Virtualization[Xen]

Operating Systems
Linux Kernel Hacking

Block Chain technologies
Familiar with Bitcoin and Ethereum

Zero Knowledge Proofs

Quantum Information Theory

Number Theory

ACHIEVEMENTS AND SIGNIFICANT EVENTS

2017 Attended INDOCRYPT 17
2017 Attended Blockchain workshop held at ISI Kolkata
2017 Secured research internship as security researcher at
R.C Bose Center for cryptology and security, ISI Kolkata
2017 Head of CompSoc [Computer Society], IEEE NITK student branch
2016 Awarded Indian Academy of Sciences Summer Research Fellowship
2015 Executive membership of IEEE NITK Chapter - CompSoc
2012 Secured third position in the zonal TCS Rural IT quiz
2011 Visited Hutchesons Grammar School, Glasgow as a part of the
student exchange program funded by the British Council
2011 Attended Open Source Summit held at NMAMIT, Nitte
