# Aaditya M Nair

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### **EDUCATION**

#### **IIIT - HYDERABAD**

B.Tech + MS (By Research) IN COMPUTER SCIENCE Expected Apr 2019

Cum. GPA: 7.65

#### **DELHI PUBLIC SCHOOL**

Grad. April 2013 | Bhilai, India

## LINKS

Blog://BlogOfNair Github://AadityaNair LinkedIn://aadityanair

## COURSEWORK

Principles of Information Security Advanced Computer Networks Error Correcting Codes Cloud Computing Operating Systems Distributed Systems Natural Language Processing Introductory ML

# **SKILLS**

Advanced
Linux System Administration • Python
Intermediate
Ceph • Libvirt • C
Familiar
ML • NLP

# OTHER STUFF

Merit List for 2016-17 Ex Student Placement Coordinator Amateur Violinist

#### WORK FXPERIENCE

#### **GOOGLE** | SUMMER OF CODE INTERN

May 2018 - Aug 2018 | Remote

Worked with the CCExtractor team during the summer on Project Nephos.

#### **FACEBOOK** | Production Engineering Intern

June 2017 - Sept 2017 | London, UK

- Worked on improving hypershell, a push based massively parallel command execution tool.
- This is how Facebook runs ad-hoc commands on the **entire fleet**.
- Improved performance of some IO operations by more than 90%.

#### IIIT - HYDERABAD | STUDENT SYSTEM ADMINISTRATOR

Sept 2016 - present | Hyderabad, IN

- Manage services run by the institute that serve ~3000 people at any time
- Available 24hr on-call for all incident response and remediation.
- Auditing and hardening current security infrastructure.
- Involved in mentoring the next generation of student sysadmins.

#### IIIT - HYDERABAD | RESEARCH ASSISTANT: SPCRC

May 2015 - present | Hyderabad, IN

- Working under the advisory of Dr. Lalitha Vadlamani on the recovery features of **Reed Solomon** codes.
- Trying to create new **erasure codes** with interesting properties.
- Also tasked with managing the the various machines that make our lab's **cluster**.

## SELECTED PROJECTS

#### **PROJECT NEPHOS**

This is a tool that will be used by CCExtractor to record large number of freely streamable channels, postprocess them and upload to a storage of choice. Current support is for **Google Drive** and **FTP**.

#### HIGH AVAILABLE DIRECTORY SERVER

Setup a highly available system for the institute's **LDAP** servers using **Pacemaker**. This setup was resilient to failure of **one host** serving as an hot backup. All communications are secured by **TLS**.

Also migrated data from the old setup to the new one with zero downtime.

#### **HTTP PROXY**

A multi-threaded program written in Python which proxies HTTP requests and forwards them. It also supports simple caching of requests.

#### LDA WITH DEEP LEARNING

Implementing Latent Dirichlet Allocation(LDA) using a Deep Learning Model as described in a paper with similar name. The neural net model **outperformed** the Bayesian model.

## **PUBLICATIONS**

(under review) A. M. Nair and V. Lalitha, **Maximally recoverable codes with hierarchical locality**. In 2019 Twenty-Fifth National Conference on Communications (NCC 2019), Bangalore, India, Feb. 2019