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

AWARDS

RunnerUp **Best Paper** @ NCC 2019
Merit List for 2016-17

OTHER STUFF

Ex Student **Placement Coordinator**
Amateur Violinist

WORK EXPERIENCE

TOWER RESEARCH CAPITAL | Software Engineer
July 2019 – Present | Gurugram, IN
- Part of the Information Security team trying to secure our IP from internal/external threats.
- Worked with various stakeholders to enhance observability into security events within critical infrastructure and recommend improvements.

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 – May 2019 | 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 – May 2019 | Hyderabad, IN
- Working under the advisory of Dr. Lalitha Vadlamani on **Hierarchical Local Erasure Codes**. Developed optimal constructions for the same.
- The work we published earned a **Runner-up Best Paper Award** at the conference.
- 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**.

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.

RESEARCH PUBLICATIONS

[1] A. M. Nair and V. Lalitha. Maximally recoverable codes with hierarchical locality. In *2019 National Conference on Communications (NCC) (NCC 2019)*, Bangalore, India, Feb. 2019.