# **EDUCATION**

## **IIIT HYDERABAD**

B.Tech. (H) + M.S. BY RESEARCH in ECE with specialization in Robotics Expected Graduation: 2020

# COURSEWORK

Distributed Systems\* • OS and Algorithms\* • Principles of Information Security • Programming Workshop • Statistical Methods in AI • Computer Vision • Communication Networks • Mobile Robotics • Advances in Robotics

# POSITIONS

CLUB COORDINATOR, 2017-2018 Photography Club, IIIT Hyderabad SYSTEMS ADMINISTRATOR Felicity 2018

PHOTOGRAPHER, 2016-2017 Media Team, IIIT Hyderabad

# SKILLS

## PROGRAMMING/SCRIPTING

Regular:

C • C++ • CSS • JS • Matlab • PHP Pvthon • Shell

Familiar:

Go • Lua • MySQL • Ruby

## LIBRARIES/FRAMEWORKS

Robotics:

Gazebo • OpenCV • ROS • Unreal Engine Web:

AngularJS • Django • Flask • Laravel nodeJS • Rails

Machine Learning:

PyTorch • Tensorflow • Torch

#### **SYSTEMS**

Nginx • Apache2 • LDAP • Postfix Dovecot • Nagios • Icinga • Bind • Slurm Docker • Libvirt • OpenVZ • Wazuh Snort • Squid • iptables

## **OPERATING SYSTEMS**

Linux • Windows

## **EXPERIENCE**

#### **ROBOTICS RESEARCH CENTRE** | Systems Administrator

Expected Mar 2018 - Jun 2020 | Hyderabad, IN

• Responsible for the maintenance and deployment of centre's high performance cluster and various services (Monitoring, NS, LDAP, Git, etc) of the centre.

## **IIIT HYDERABAD** | STUDENT SYSTEMS ADMINISTRATOR

Expected May 2017 - Jun 2020 | Hyderabad, IN

- Responsible for maintenance and deployment of institute-wide infrastructure and services (Squid, LDAP, Email, lists, NS, CAS, PXE, etc), 802.1x over network, routing and firewall configuration serving ~3000 users.
- Automated server configuration for institute's **reverse proxy** server that serves over 150 domains.
- Automated one the mail server migration to Google Suite.
- Deployed transparent proxy with SSL interception using SNI parsing.

## RESEARCH

#### PROBABILISTIC NAVIGATION OF ROBOTS

Under the guidance of Prof. K. Madhava Krishna

- Characterize bot and obstacle as noise samples from a distribution.
- Moment matching of distributions in Hilbert space.
- Efficient implementation using reduced sets.

# **PROJECTS**

### UNROLLING THE SHUTTER

 A Convolutional Neural Network that corrects the distortion caused due to rolling shutter of the camera from a single image.

#### **NEURAL CAPTIONING**

- A combination of a CNN and an LSTM networks that gives a caption for the input image.
- Different versions of the network by tweaking LSTM
  - Traditional LSTM With attention With sentinel gate.

#### **GUEST ACCOUNTS MANAGEMENT**

 Portal for automation of adding guests to institute's central LDAP, restrict the logins of these users only to access institute network and automation of account deletion from LDAP.

#### PEER TO PEER FILE SYNCER

• A dropbox like file syncer.

#### ACCOUNTS MANAGEMENT PORTAL(In Progress)

 A central portal to manage and review account details, logs, etc., for IIIT Hyderabad (inspired from accounts.google.com).