# Jayaganesh K

jayaganesh1997@gmail.com (+91)-70329-14710 D222 OBH, IIIT Hyderabad,Gachibowli,Hyderabad

#### **EDUCATION**

### BTech Computer Science and Engineering

2015 - current

 $International\ Institute\ of\ Information\ Technology, Hyderabad$ 

CGPA - 9.76 and Dean's list for all semesters.

Currently doing honors under Dr.Madhav Krishna in Robotics Research Center.

# **WORK EXPERIENCE**

#### Site Reliability Engineering Intern- YouTube(Google)

Summer 2017

Google Zurich

YouTube video caching & streaming

Developed features on internal tool for YouTube traffic analysis

Worked on YouTube internal tools used for video streaming and traffic analysis.

Worked on client map data from network edge routers.

#### Research intern- IBM-Research

Summer 2016

IBM Research Lab, Bangalore

Vision Analytics in Agriculture and Solar

Solar irradiation estimation using Skycams

Worked on thermal images from Skycams and analyzed with Image processing,

Computer Vision, Machine Learning & Deep learning approaches.

Work included feature extraction, anomaly detection & data manipulation.

#### Product development intern- Hyperverge

Winter 2015

Hyperverge Inc-http://hyperverge.co/

Blur Detection and Estimation - a Computer Vision(CV) & Machine Learning project(ML)

Implemented state of the art papers which used Wavelet based approach to address the problem of  $Estimation \ of \ BLUR$  in an image

#### Teaching Assistant

2016-current

IIIT-H

Software Systems Analysis and Design - Monsoon 2017

Electrical Science - Monsoon 2016

## PUBLICATIONS/PROJECTS

#### IIIT-H Robotics Research Center (RRC)

2015-Current

Autonomous driving

Working on CV/ML aspects of Autonomous driving. RRC

#### Association of Math Teachers of India(AMTI)

Winter 2011

Paper presentation in the 45th Annual Conference

Creating comfort zone through time allocation-Paper

Statistical model on queuing theory and efficiency.

## COURSES UNDERTAKEN

• Computer Science: Distributed Systems\*, Statistical Methods in Artificial Intelligence\*, Operating Systems; Introduction to Database; SSAD(Software Systems Analysis & Design) & Project; Algorithms; Data Structures; Introduction to C programming; IT-Workshop; Computer

- System Organization; Computer Networks; Artificial Intelligence; Graphics
- Electrical/Engineering Courses: Mobile Robotics\*, Digital Logic and Processing; Basic Electronic Circuits; Electrical Science; Digital Signals Analysis and Application; Engineering Systems
- Mathematics: Complexity and Advanced Algorithms\*, Discrete Math; Introduction to Linear, Abstract algebra & Vector Spaces, group theory; Complex analysis, vector calculus & Probability, statistics; Formal Methods
- Courses Audited : Computer Vision(CV)
- Humanity subjects: Understanding Raga Semiclassical forms of Indian music\*, Raga & Rhythm Humanity & Social Skills (HSS) (Carnatic Music-Vocal); Introduction to Human Sciences
- MOOC Courses: Coursera Machine Learning course; Digital Image Processing course

# COURSE PROJECTS

#### **Artificial Intelligence**

Spring '17

Ultimate Tic-Tac-Toe(UTTT) bot(Team of 2)

Placed Ist in UTTT tournament of 95 bots

Graphics

Spring '17

3D game+animation movie(Team of 2)

Developed Bloxorz game in OpenGL3 & made a animation *Movie* in Unity

ITWS-II

Spring '16

Tache(Team of 2)

Built a Task Management portal as part of the course in Web2Py

## LEADERSHIP SKILLS

SSAD Headed the team building the IIIT Placement Portal as a part of the course

Engineering Headed the team (25 members) for building a system for

systems Modular Robot for all terrain exploration under Dr.Madhav Krishna

# **ACHIEVEMENTS**

- Recipient of **Dean's Award** for Academic performance for all semesters.
- Awarded **Best Outgoing Student** for the academic year 2014-2015 by DAV Public School, Velachery.
- International Olympiad of Informatics Training Camp attendee(IOITC) in 2014 & 2015 with All India Rank(AIR)-5 in IOITC in 2014 & represented India at APIO(Asia Pacific Informatics Olympiad) in 2014
- Secured All India Rank(AIR)-704 in JEE Advanced (150,000 students appeared) & secured All India Rank(AIR)-305 in JEE Mains (1,300,000 students appeared)
- Awarded Kishore Vaigyanik Protsahan Yojana(KVPY) by Indian Institute of Science(IISc) & awarded (National Talent Search Examination)NTSE Scholarship by National Council for Educational Research and Training(NCERT)

## SKILLS/INTEREST

Languages C/C++, Python, Javascript, MIPS32(Assembly language), HTML/CSS

Platforms Linux & Windows

Software OpenCV, Matlab, Scikit, Pandas, PyGame, MySQL, OpenGL3

Frameworks DJANGO, WEB2PY, UNITY

Hobbies Playing Keyboard (Carnatic genre), Chess (South-Zone school team), Sudoku

<sup>\*</sup> Currently doing