# Sathvik Sanjeev Buggana

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# **EDUCATION**

## INTERNATIONAL INSTITUTE OF INFORMATION TECHNOL- Aug 2017 - Nov 2017 **OGY, HYDERABAD**

B.Tech in Computer Science

2016-2021 (Expected) Current CGPA: 9.16

## FIITJEE JUNIOR COLLEGE, HYD MPC.

June 2014 - May 2016 Percentage: 98

#### **GOOD SHEPHERD SCHOOL**

Grad. May 2014 | Nandyala, AP

GPA: 9.8

# SKILLS

## **PROGRAMMING**

**OS:** Linux.Windows

Programming Languages: C, C++,

Java(Basic)

Scripting: Python, Php, Bash

Web Dev. Technology: HTML5,CSS3 ,JavaScript,Jquery, NodeJs, Bootstrap Web Frameworks: MySql, Dash, Ruby on

Rails:

Databases: MySQL, MongoDb Graphics: OpenGL2/3, WebGL Image Processing: Matlab Data Visualization: Plotly

#### **MODULES**

**Python:** Numpy, Pandas

Beautiful Soup Plotly, Matplotlib

Geopy

Prody, Biopython Scikit-Learn, Theano

# **WORK EXPERIENCE**

## **NEBULAE SOFT** | Software Engineering Intern

- A three month internship as a part of Structured Systems and Development
- Using Mongoose, MongoDb, NodeJs primarily, I helped in extending the functionality of the client's existing app.
- Used a systems oriented approach with detailed documentation, as this was a project for SSAD Course.

# MAJOR PROJECT EXPERIENCE

## **TWITTER DATA ANALYSIS FOR ELECTIONS 2019**

Spring 2019 (Ongoing) | Independent Study

I am doing independent study with Prof. Ponnurangam Kumaraguru from IIIT-D. We have been performing analysis of twitter data for the upcoming elections 2019 We have been consolidating our analysis in the dashboard here.

- Analysis of verified political handles, around 1.252 in number, to see their twitter follower count, following and tweet count, since August 2018 (Jan 2019- Feb 2019)
- Moving the dashboard from react based app, to Dash, a python based web framework, app (Feb 2019 - Mar 2019)
- Location based analysis of tweets (Mar 2019 Ongoing)

## DEEP LEARNING FOR PROTEIN SECONDARY STRUCTURE DETERMINATION Spring 2019 (Ongoing) | Part of Machine Learning for Natural Science Course

- Using deep learning we are trying to improve the accuracy of protein secondary structure determination.
- We are using Keras, a python based deep learning library for building the deep learning model

#### FACE RECOGNITION FROM SCRATCH

Monsoon 2018 | Part of Stastical Methods in AI course

- Using basic concepts (PCA) and basic Python libraries like Numpy, Python PIL library, a face recognition classifier has been designed.
- Designed a Naive Bayes and Linear Classifier from basic concepts.

## **CNS Projects**

Spring 2017, Monsoon 2018 | Various projects in CNS Courses

• Extensive use of Python for Molecular Dynamic Simulations, & Bio-Informatic Tasks such as Phylogentic Tree construction & analyzing Protein Structures.

# PERSONAL PROJECTS

## **AUTOMATED EVENT DETECTION**

Ongoing | Self Interest

Hosted on github here

- Using beautiful soup to extract content from web page
- Using NLTK's named entity recognition to extract events and dates
- Using Google Calendar API to create calendar events

## COURSEWORK

Machine Learning for Natural Sciences Optimization Methods Independent Study Statistical Methods in Al Operating Systems

CNS Lab

Graphics

Formal Methods

Introduction to Databases

Structured System Analysis and Design

Algorithms

Data Structures

Computer Programming

IT Workshop 1

IT Workshop 2

Digital Logic and Processors

Computer System Organization

# **ACHIEVEMENTS**

Qualified for Dean's List for academic year 2016-2017 (7 stars)

Qualified for Dean's List for academic year 2015-2016 (4 stars)

\* Dean's List: Among top 5% in academics

# LINKS

Github:// **7vikpeculiar** Gitlab:// **7vikpeculiar** Webpage:// **7vikpeculiar** 

# MINOR PROJECT EXPERIENCE

#### **GAME DEVELOPMENT**

Spring 2018 | Part of Graphics Course

- Using OpenGL and WebGL, I designed a few games.
- A 2D Mario type game, where the player controls a ball, in a terrain collecting coins and killing enemy spikes.
- A 3D version of Legend of Zelda, where the character moves in a boat, killing monsters of various difficulties, and various views.
- Used WebGl to create a tunnel rush game.
- In all these projects, I extensively used, the concepts of camera movement, rotation, changing perspective.

#### C-SHELL

## Monsoon 2018 | Part of Operating Systems Course

- Built a Bash-like shell using C and POSIX Syscalls.
- Implemented certain built-in commands from scratch (cd, ls, pwd, echo).
- Implemented background and foreground processes, piping and redirection.

# ACADEMIC EXPERIENCE

## **TEACHING ASSISTANT**

- Assistant to Prof. Suresh Purini for Computer Systems Organisation (UG-1st year course) for Spring 2019
- Assistant to Prof. Lakshmi Burra for Real Analysis course (UG-1st year course)
- Responsibilities include weekly tutorials, holding office hours, grading quizzes and assignments

# RESPONSIBLE POSITIONS HELD

## **CURRENT POSITIONS**

- **Student Placement Coordinator:** Responsible for the campus placement for the year 2019
- VP Membership, Toastmasters: Elected as the vice president for membership at IIIT Toastmasters club. Duties involve ensuring the renewal of old members, and motivate the smooth transition for new members into Toastmasters
- Club Coordinator Literary Club: Conducting monthly meetings, and planning the agenda for each meet. In each meet, we discuss pop culture, books, movies or conduct fun activities.

## **PAST POSITIONS**

• Student Counselling Forum - Moderator: Maintained the IIIT Student Counselling Forum, moderating, answering queries from the students, and redirecting them to the appropriate department for further queries