

# Harshith Goka Computer Science & Engineering Indian Institute of Technology Bombay

150050069 UG Second Year Male

DOB: 9-3-1998

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2017	9.14
Intermediate/+2	Telangana State Board of Intermediate Education	Narayana IIT Academy Attapur	2015	98.40
Matriculation	Board of Secondary Education, Andhra Pradesh	Narayana IIT Olympiad School	2013	9.70

# Scholastic Achievements & Credentials \_\_\_\_\_

• Secured All India Rank 25 in JEE (Advanced) out of 150,000 candidates

(2015)

- Secured All India Rank 8 in JEE Main (B.Arch) out of  $150,\!000$  candidates

(2015)

• Secured All India Rank 26 in JEE Main (B.Tech) out of 1.3 million candidates

(2015)

- Awarded the Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship held by the Department of Science and Technology, Government of India with an All India Rank 70 (2014)
- Secured State Rank 19 in AP State Common Entrance Test out of about 150,000 candidates (2015)
- Secured State Rank 60 in Telangana State Common Entrance Test out of about 250,000 candidates (2015)
- Awarded **AP grade** for excellence(given to top 1% students) in Engineering Drawing

(2015-16)

• Pursuing Minor in Electrical Engineering Department

(2016)

## Projects

#### Simple GUI Based Text File Compressor and Polynomial Processor

(Oct' - Nov' 2015) IIT Bombay

Prof. Varsha Apte - Course Project

- Developed a very simple dictionary based text compression which is based on Huffman Coding Algorithm
- Developed the GUI using simplecpp graphics, a very basic drawing library
- Developed a full fledged polynomial processing with plotting functions, roots of the equation
- Also included is a paint application with very simple drawing tools

#### Feedback and Remainder App

(Oct' - Nov' 2016)

Prof. Sharat Chandran - Course Project

IIT Bombay

- A multi-purpose academic app for college students
- A web portal to update the assignment deadlines, classes and quizzes/exams and analyse feedback data from the client Android app
- Server portal based on **Django** with all the default configurations and a few security measures against XSS, CSRF, clickjacking etc.
- A client android app fetches from the cloud and makes a personalised timetable and deadlines and allows us to send feedback on the courses and
- Asynchronous implementation of the Android app for instant synchronization from the server

# Self Projects

#### Gesture Control Glove for Android

(Summer 2016) IIT Bombay

Institue Technical Summer Project

- Developed a glove with flex sensors and motion sensors with bluetooth module
- Written code to read and transmit data for two simple AVR based Microcontrollers attached to glove
- Created an android application to connect to the glove via bluetooth and receive sensor data
- Used Dynamic Time Warping queue based algorithm to process the stream of data to recognize the gestures
- Implements many android system function calls like Volume control, Brightness control etc.

### Interests

- Data Analysis, Machine Learning
- Operating Systems
- Data Structures and Algorithms, Discrete Structures

# TECHNICAL SKILLS

**Programming** Fluent in C/C++, Experienced in JAVA, Android App

Development, Python, Bash, GNU Octave and familiar

with Rust

Web Development Fluent in HTML, CSS and JavaScript

Web Libraries Materialize CSS, jQuery

**Software** Experienced in Git, MATLAB, SolidWorks, AutoCAD,

Box2D and familiar with LATEX, Inkscape, gnuplot

### Positions Of Responsibility —

Web Co-ordinator (2015 - 2016) Entrepreneur Cell IIT Bombay

• Development of the College Representative Portal, NEC (National Entrepreneurship Challenge) web application and CR (College Representative) web portal

- Link of Facebook Likes and Shares to a Score assigned to each of college representatives users in the CR Portal
- Responsible for developing and updating the database for the CR portal

# KEY COURSES UNDERTAKEN \_\_\_\_\_

#### Computer Science

Data Structures and Algorithms + Lab \*, Software Systems Lab \*, Discrete Structures \*, Data Analysis and Interpretation \*, Machine Learning \*\*, Digital Logic Design + Lab \*\*, Design and Analysis of Algorithms \*\*, Logic for Computer Science \*\*, Computer Networks + Lab \*\*, Abstractions and Paradigms for Programming, Programming Paradigms Lab

#### Mathematics

Calculus, Linear Algebra, Differential Equations

#### Others

Social Psychology, Introduction to Electrical and Electronics Circuits \*, Biology, Quantum Physics and Application, Basics of Electricity and Magnetism

\* Course to be completed by November 2016 \*\* Course to be completed by April 2017

#### Extracurriculars \_

• Completed a basic course in **French Language** by Telangana State Board of Intermediate (2013 - 2015)

• Completed a basic Japanese Language course by the IIT Bombay International Relations Office (2015 - 2016)

- Represented hostel in **Group Dance** competition organised for Freshman by Cultural Club IIT Bombay (Sept' 2015)
- Participated in the **Remote Control Plane** making competition by the Aeromodelling Club of IIT Bombay (Oct' 2015)
- Represented hostel in the General Quiz competition by the Literature Club of IIT Bombay (Sept' 2016)
- Keen interest in Music and playing Guitar
- Completed a basic guitar course offered by IIT Bombay on behalf on NSO (2015 2016)
- Participated in the hackathon Code.fun.do conducted by Microsoft (Nov' 2016)