

# Sachin Chandani

## Education

- 2016 - **Bachelors of Technology - Electronics and Communication.**  
Present International Institute Of Information Technology(IIIT), Hyderabad
- 2013-2014 **Senior Secondary, RBSE, Noble School, Falna.**  
GPA(Major): 9.83
- 2012-2013 **Secondary, RBSE, Emmanuel Mission School, Pali.**  
GPA: 8.76

## Work Experience

- May 2018 - **Web Administrator, QUERY FORUM - IIIT HYDERABAD, .**  
Present -Maintaining **frontend, backend** and **server** of the forum.  
-Working with latest **WordPress** technologies.
- May 2018 - **Full Stack Developer, MERAK.AI .**  
July 2018 -**Digitization of menu cards** for food delivery companies using **machine learning algorithms**.  
-Dashboard development for state-of-art machine learning products.

## Achievements

- Codechef **Sport Programming Contests:**  
2017-2018 -Secured **25th position all over the globe** and **13th position in India** in Codechef's monthly programming contest(August Lunchtime'18).  
-**244th position** all over the globe in pre-elimination round of Snackdown'17. Team: '**blue\_legend**'
- Programming Profiles:**  
Codechef: blue\_legend, Rating: 1965(Purple)
- November 2017 **Felicity Buzz - IIIT Hyderabad Codecraft, Problem Setter.**  
Successfully curated and tested original problems in the annual programming competition organized by IIIT-Hyderabad.
- May 2016 - **Joint Entrance Exam(JEE) 2016.**  
July 2016 -99.35 Percentile in JEE Mains 2016.  
-5936 All India Rank in JEE Advanced 2016.

## Projects

- July 2018 **Automated Document Cropping - CamScanner.**  
-CamScanner like automated document detection and cropping over a plane background.  
Node.js, Python, OpenCV, HTML, CSS.
- June 2018 **Sentiment Analysis - WordCloud.**  
-Sentiment analysis of latest tweets to create a heat-map using developer keys and NLP libraries.  
NLP, Python, JavaScript, HTML, CSS.
- April-May 2018 **Heart Rate Monitoring Using PPG Signals.**  
-Uses PPG, ECG and Acceleration Signals to monitor heart rate with Signal Decomposition, Spectrum Peak Tracking and Sparse Signal Reconstruction.  
MATLAB, Python, Bash.

- February-May 2018 **Swarm Intelligence - Variation Resistant Sizing Of MOSFET Transistor Circuits.**  
 -Transistor sizing for digital circuits which uses Artificial Swarm Intelligence/Ant Colony Optimization.  
 -The leakage of 45nm MGK full adder was reduced to 50% during testing.  
 Artificial Intelligence, C++, Python, HSPICE.
- February-2018 **Shape Plotting Of The Objects.**  
 April -Shape Plotting System which can plot 3 dimensional view of any object in x-y-z Cartesian system.  
 2018 -The output can be used to for development purpose i.e. input to a 3D printer.  
 C(embedded), Bash, Micro-controllers(Arduino UNO) , Circuit Designs.
- November - **Linux C Shell.**  
 December -A linux like shell developed purely in C with all command sets and piping features implemented and  
 2017 tested.  
 System calls, C.
- October 2017 **Bomberman Terminal Game.**  
 -UNIX terminal game based on original BOMBERMAN, purely developed in python without using  
 any external libraries and having multiple difficulty levels.
- August- **Python Scripting.**  
 October -Wrote python scripts to imitate random walk problems in vmd.  
 2017 -Worked with protein model and wrote programs to rotate it along any given axis in vmd.
- September **Tic Tac Toe Bot.**  
 2017 -An AI based Tic Tac Toe bot which uses min-max algorithm to ensure the fastest victory possible.  
 Artificial Intelligence, C++.
- March-April **Obstacle Avoiding Bot.**  
 2017 -A bot prototype which avoids obstacles in it's path and changes it according to the requirements.  
 Arduino, C(embedded), Circuit Designs.

## Relevant Coursework

- Computer Science & Mathematics Data Structures and Algorithms, Computer System Architecture, Cache Management & Memory Hierarchy, IT Workshop(1 & 2), Time Complexity Analysis, Graph Theory, Linear Algebra, Probability and Random Processes.
- Electronics Signals and Systems, Digital Signal Processing, Embedded Hardware Designs, Digital Logic and Processors, Electronic Workshop(1 & 2), Linear Electronic Circuits.
- Miscellaneous Atom models, Schrodinger eqn, Lagrangian/Hamilton Mechanics, Random Walks, Diffusion, Heat, Engineering Systems, Humanities.

## Technical Skills

- OS Linux, macOS, Windows
- Programming and Scripting C, C(embedded), C++(STL), Python, Bash, Assembly.
- Web HTML5, CSS3, Node.js, Bootstrap.
- Miscellaneous Git, OpenCV(Basic),  $\text{\LaTeX}$ , MATLAB, VLSI Designs, Micro-Controllers.

## Positions Of Responsibility

- |  |                                 |
|--|---------------------------------|
| <b>Overall Head, Marketing Team, Felicity IIIT-Hyderabad</b> | <i>September 2018 - Present</i> |
| <b>Coordinator, Campus Life Committee, IIIT-Hyderabad</b>    | <i>May 2018 - Present</i>       |
| <b>Apex Body Member, IIIT-Hyderabad</b>                      | <i>March 2018 - Present</i>     |
| <b>Cultural Coordinator, VAYU House, IIIT-Hyderabad</b>      | <i>June 2018 - Present</i>      |
| <b>Student Mentor, IIIT Hyderabad</b>                        | <i>June 2017 - March 2018</i>   |
| <b>Logistics Manager, VAYU House, IIIT-Hyderabad</b>         | <i>June 2017 - March 2018</i>   |