

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

- August 2018 **Codechef August Lunchtime'18.**
Secured **26th position all over the globe** and **13th position in India** in Codechef's monthly programming contest.
- June 2017 **Codechef SnackDown'17.**
244th position all over the globe in pre-elimination round. Team name: '**blue_legend**'
- November 2017 **Felicity Buzz - IIIT Hyderabad Codecraft, Problem Setter.**
Successfully curated and tested original problems in the annual programming competition organized by IIIT-Hyderabad.

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- **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.

Programming Profiles

- Github [sachin-chandani](#).
 CodeChef [blue_legend](#), (Current rating: 1756 - blue rated).

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), L^AT_EX, MATLAB, VLSI Designs, Micro-Controllers.

Positions Of Responsibility

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| Coordinator, Campus Life Committee, IIIT-Hyderabad | <i>May 2018 - Present</i> |
| Apex Body Member, IIIT-Hyderabad | <i>March 2018 - Present</i> |
| Cultural Coordinator, VAYU House, IIIT-Hyderabad | <i>June 2018 - Present</i> |
| Core Team Member, Felicity IIIT-Hyderabad | <i>November 2017 - January 2018</i> |
| Student Mentor, IIIT Hyderabad | <i>June 2017 - March 2018</i> |
| Logistics Manager, VAYU House, IIIT-Hyderabad | <i>June 2017 - March 2018</i> |