# Aman **Singh**

CS Undergrad ·

☐ (+91) 86290-15159 | ✉ singh.amansingh935@gmail.com | ⌂ www.aman935.github.io | aman935 | amansinghseo

## **Edu**cation

**IIT Mandi**                                                                                     *Mandi, Himachal Pradesh*
B.Tech. in Computer Science and Engineering (Ongoing)/2019                              *Aug. 2015 - PRESENT*
- Current CGPA : 7.67

**Marigold Public School, Noida**                                                                 *Noida, U.P.*
XII from CBSE Board                                                                               *July. 2014*
- Scored : 89.8 %

**Marigold Public School, Noida**                                                                 *Noida, U.P.*
X from CBSE Board                                                                                 *July. 2012*
- Scored : 9.8 CGPA

## **Cou**rses

**Artificial Intelligence**,
**Pattern Recognition**,
**Computer Organization**,
**Advanced Database Practicum**,
**Introduction to Communicating and Distributed Processes**,
**Introduction to Formal Concept Analysis(Coursera)**,
**Probability and Random Processes**,
**Advanced Data Structures and Algorithms** ,

## **Pro**jects

**Data Mining-Modification of ECLAT/LCM algorithms**                                               *IIT Mandi*
Formal Concept Analysis Project                                                                   *July. 2017 - Ongoing*
- Worked on modifying the ECLAT / LCM algorithm by Dr. Christian Borgelt to work on distributed systems. The algorithm is used to mine Formal Concepts to build concept lattices.
- Made programs and scripts to test the algorithm on larger dataset.
- Generated boolean context from the CSV file to mine Formal Concepts from it.
- Given the task to parse JSON file to CSV such that concepts could be mined from it.

**Academic Project for Advanced Database Practicum Course**                                        *IIT Mandi*
PANDORA - Music Streaming Website(Ruby on Rails)                                                  *3rd Semester*
- Developed this website using Ruby on Rails framework and MySQL database. Responsible for front-end, database schema and helped with back-end.

**Project on implementation of Formal Concept Analysis**                                           *Central Library, IIT Mandi*
Classification of Library Books                                                                   *June 2017 - July 2017*
- Built a concept lattice of library books using Orient DB for a more meaningful classification and arrangement.

**Using Arduino and AVR shield**                                                                  *Inter-IIT Tech-Meet*
Voice controlled pick and place robot                                                            *2nd Semester, Jan. 2016- Feb. 2016*
- Won 3rd Prize in the robotics event of Inter-IIT Tech Meet.
- Worked on the program(written in C) and training of the AVR shield.

**Built as Coursework**                                                                          *IIT Mandi*
Pattern Recognition Models/Classifier                                                            *Aug. 2017 - Ongoing*
- Built Bayesian, K-Means Clustering and Gaussian Mixture Models classifiers for assignments using python libraries(pandas, numpy, scipy, sci-kit learn).

**Front-end and Webmaster**                                      *Mandi, H.P.*

THE SOLAR LABS                                                   *Feb. 2016- June. 2016*

- Developed the front-end of the main website and customer management system.
- Set up a WordPress blog for the Start-Up.

**Two player CLI game made in first semester**                   *IIT Mandi*

TIC-STACK-TOE                                                    *Aug. 2015- Sep. 2015*

- Interactive command line game written in C with a colorful interface.

## Skills

Programming Languages : C++, C, Python, Bash,

Tools: Git, Ruby on Rails, OrientDB, Concept Explorer, MySQL, GNU Emacs, php, Arduino,

Jekyll, Wordpress, Python Libraries: Scipy, Numpy, Pandas, Scikit-Learn ,

Competitive Programming ,

## Extracurricular Activity

**PC  Programming Club**                                         *IIT Mandi*

CORE MEMBER                                                      *Mar. 2017 PRESENT*

- Selected core member and project mentor to the official Programming Club.

**Exodia (Annual Technical-Cultural Fest)**                      *IIT Mandi*

FINANCE HEAD AND CORE TEAM MEMBER                                *Sept. 2016 Aug. 2017*

- Selected as the Finance head to the fest. Completed the tasks with integrity and responsibility.

**GCS (Guidance and Counselling Service)**                       *IIT Mandi*

STUDENT MENTOR AND MEMBER, GUIDANCE AND COUNSELLING SERVICE 2016 & 2017   *2016 & 2017*

- Provided counselling and guidance to freshers as a mentor.

## Honors & Awards

ACADEMIC

| | | | |
|---|---|---|---|
| 2016 | **Teaching Assistant**, | Introduction to Computation for Engineers course | *IIT Mandi* |
| 2017 | **Teaching Assistant**, | Advanced Data Structures and Algorithms Course | *IIT Mandi* |
| 2016 | **Bronze Medal**, | Inter-IIT Tech Meet 2016 | *IIT Mandi* |

SPORTS

| | | | |
|---|---|---|---|
| 2016 | **Gold Medal**, | Intra-College Basketball tournament | *IIT Mandi* |
| 2015 | **Silver Medal**, | Inter-Year Sports Tournament(Basketball) | *IIT Mandi* |