Aashish Kumar

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CAREER OBJECTIVE

- I wish to develop my skills in Computer Science specifically in the field of Machine Learning and Web development and utilize them so that i can further enhance the motives of a professional organization by working and learning from them.

EDUCATION

- **Indian Institute of Technology Mandi**   Mandi, Himachal Pradesh
  Bachelor of Technology in Computer Science and Engineering; CGPA: 7.52   *Aug. 2016 – Present*

PROJECTS

- **Code Maniac** : A web-app that can accept and judge computer-programs, based on a given input and expected output set. Developed on PHP and can currently handle C and C++ languages.
- **Docker Containerization (WIP)** : The managing and creating of the docker containers for the apps to run on the IIT Mandi server, so that they can be ran individually without any conflict, the knowledge of Nginx, DNS ports is being used in this project.
- **Digit Recogniser (CNN from Scratch)** : A web-app to recognize hand written digits or written by user on the given drawing board. Developed on Python Flask framework it uses Convolutional Neural Networks implemented from scratch without using any Machine or Deep Learning library.
- **Image Compressor Algorithm** : A Machine Learning Algorithm which uses K-Means Algorithm in order to compress an image by reducing the number of colors in the image to K (given by user) most used colors. Implemented using Scikit-Learn ML library currently is an algorithm but soon will be an app.
- **Human Follower)** : An automated human following bot which uses Bluetooth and GPS to track the location of the Android device of the person that needs to be followed. It's motion is automated using Arduino microcontroller in the body of the bot which is connected to the Android app developed to track person's location with GPS and sending instructions to Arduino via Bluetooth. All of the Arduino bot coding was solely done by me.
- **Survival Shooter** : A shooting Game developed using Unity3D, can be played on all the platforms including Windows, Mac and web player as well, you can play it on my web space *here*.

EXPERIENCE

- **Web Development Intern** Flairboat Inc.
  - **MEAN Stack Development** : Developed a MEAN stack webapp from scratch which live scraping of jobs searched on the app, from 2 other websites.
  - **AWS and Firebase Hosting** : Hosted the webapp completely on Amazon Web Services(AWS) EC2 Instance and the database is completely hosted on Google firebase.

- **Big Data Intern** AllSoft Solutions Pvt. Ltd.
  - **Big Data Tools** : In this 20 day internship, worked on a few big data tools like hive, sqoop, pig, hadoop etc. currently learning mapReduce.

- **Teaching Assistant**   IIT Mandi
  Assistant to Prof. Padmanabhan Rajan   *Feb 2018 - May 2018*
  - **IC250** : Worked as a TA in course IC250 - Programming Data Structures Practicum under the guidance of Professor Padmanabhan Rajan to create and evaluate assignments.

PROGRAMMING SKILLS

- **Languages**: Python, C++, C, Javascript, Typescript, Java, Octave/MATLAB, HTML.

- **Dev Technologies**: Git, MySQL, Python Flask, MEAN stack, Unity3D, REST APIs, Node.js, Angular, MongoDB, Express.js, Hadoop Big Data Framework, Hive, Sqoop, Pig.

- **Data Science**: Machine Learning python libraries, scikit-learn, scipy. Also a frequent participant of ML competitions held on *Kaggle*.

Relevant Courses

- Data Structures and Algorithms
- Computer Organization
- Mathematical Foundations of Computer Science
- Applied Database Practicum

Positions of Responsibility

- Co-ordinator, ACM Student Chapter, IIT Mandi
- Online Media Head, Rann-Neeti'17 (IIT Mandi's sports Fest)