



Suraj Singh

surajsingh.mail27@gmail.com ✉

+916283337474 📞

Bharatpur, India 📍

linkedin.com/in/suraj-sinsinwar in

github.com/surajsinsinwar 🐙

A pre-final year undergraduate student at the CSE Department, LPU. I have experience in competitive programming, genetic algorithms, deep learning, Front-End web design and development. I have worked on a number of projects with various groups picking up teamwork and software skills along the way. I am a tech enthusiast who likes creating new things and experimenting with them.

EDUCATION

computer science and engineering

Lovely Professional University

08/2018 - Present

7.43 CGPA

Class XII

Army Public School Mamun Cantt

05/2017

74%

Class X

Army Public School Sri Ganganagar

05/2015

8.2 CGPA

PERSONAL PROJECTS

1. Smart Rockets (10/2020 - 11/2020)

- It is a web-based project using P5.js framework, HTML and CSS.
- This project is a visualization of individuals learning to reach a target by avoiding walls and obstacles using genetic algorithm.
- Fitness of each individual = $1 / ((d + 1) * t)$.
- where d is the distance between the target and the position where an individual died and t is the time for which that individual was alive(individual die if it hits a wall or obstacle or target).

2. Cat image classification using neural networks (08/2020 - 10/2020)

- Logistic regression classifier to recognize cats using single hidden layer neural network.
- Used sigmoid function : $\text{sigmoid}(z)$ returns $(1.0 / (1.0 + \text{np.exp}(-z)))$.
- Cost Function : $(Y * \log(A)) + ((1 - Y) * \log(1 - A))$.
- where Y : actual output A : predicted output.

3. School Management System (Front-End) (05/2019 - 08/2019)

- A web based school management system Front-End.
- Technologies used:
- HTML, CSS and JavaScript.

SKILLS

Data Structures

Algorithms

C++

Object-Oriented Programming (OOP)

C

Java

HTML

CSS

JavaScript

p5.js

Python3

Genetic Algorithms

Neural Networks

ACHIEVEMENTS

- 4* CodeChef

https://www.codechef.com/users/sinsinwar_code

CodeVita Season 9

Cleared Pre-Qualifier Zonal Round. Ranked in top 9k among 250k+ participants.

- Secured rank 170 out of 2783. (06/2020)

Certificate of Appreciation for securing 170 rank out of 2783 in Project Code 2.0 hosted by CodeChef on 05/06/2020.

ORGANIZATIONS

MSP Developer Community Punjab

(06/2019 - 06/2020)

Front-End Developer and Event manager.

CERTIFICATES

Algorithmic Toolbox (02/2020 - 03/2020)

The course covers algorithmic techniques like sorting and searching, divide and conquer, greedy algorithms, dynamic programming.

Neural Networks and Deep Learning

(08/2020 - 10/2020)

Learned to build, train and apply fully connected deep neural networks and how to implement efficient (vectorized) neural networks.

Object Oriented Programming using Java

(05/2020 - 06/2020)

Data Analysis with Python (01/2020 - 03/2020)

Topics covered: Importing Datasets, Cleaning Data, Data frame manipulation, Summarizing the Data.