New Delhi, India

SAKSHAM ARORA

SOFTWARE DEVELOPER. PYTHON, DEEP LEARNING, FLUTTER.

+91 9818988182
sakshamarora1001@gmail.com
LinkedIn
GitHub
Portfolio

SKILLS

Programming Languages: Python, C++, C, Shell, Dart, Flutter
Frameworks and Libraries: Scikit-Learn, Pandas, Pytorch, Tensorflow, OpenCV, PyGame, PyQt, Flask
Others: Google Cloud Platform
Interests: Deep Learning, Machine Learning, Computer Vision, Research, Project Management, Mathematics

EXPERIENCE

Student Developer, Remote	**Google Summer of Code**	**Spring 2020 - Summer 2020**

- Project Link: Integrating Image Processing into DFFML
- Contributed to Intel's open-source project DFFML.
- Implemented OpenCV-based operations for image manipulation, pre-processing, and created pipelines.
- Wrapped PyTorch-based Convolutional Neural Network Models with dynamic loading for classification on image datasets.

Project Mentor, Remote	**Google Summer of Code**	**Spring 2021 - Summer 2021**

- Mentored student developers for Intel's Open-Source project DFFML, under the Python Software Foundation on projects involving :
    - Archive support for machine learning models
    - Data cleanup operations
    - Jupyter notebook support

Project Mentor, Remote	**GirlScript Summer of Code**	**Spring 2020 and Spring 2021**

- Project Link: Simulate
- Helped beginners with getting started with Flutter and Dart.
- Mentored student developers in implementing mathematical visualizations and simulations in Flutter.

EDUCATION

Delhi, India	**Maharaja Agrasen Institute of Technology**	**Summer 2018 – 2022 (Expected)**

- Bachelor's of Technology in Information Technology (IT)
- Current CGPA (till 6th Semester) : 8.77

Delhi, India	**Lancer's Convent**	**Spring 2004 - Spring 2018**

- High School - Class X : 9.0 CGPA
- CBSE - PCM with Computer Science - Class XII : 87.2%

PROJECTS

- **Handwrite** — Python, Typography, Image Processing · cod-ed/handwrite
    - A tool that lets anyone create custom fonts based on their handwriting which can easily be used in text editors and word processors.
- **RoadFighterAI** — Python, AI, Deep Learning · sakshamarora1/road-fighter-ai
    - Remade the racing arcade game 'Road Fighter' using the PyGame library.
    - Used reinforcement learning techniques like NEAT and Deep Q learning using PyTorch to create an AI car agent to learn to drive through traffic without collision.
- **Simulate** — Flutter, Dart · cod-ed/simulate
    - A collection of smooth, informative, and beautiful simulations and visualizations based on mathematical concepts and algorithms.
    - Support for Android, iOS, and Web.

Other Projects
- BoxIt: A Flutter-based multiplayer dot connecting game using Firebase.
- Toy-Neural-Network: A neural network library written from scratch for the purpose of better understanding deep learning concepts.
- Various Computer Vision projects such as Image Colorization, Sudoku Solver, etc.
- Authored DFFML Pytorch Models and Image Preprocessing Operations PyPI plugins during GSoC'2020.