SIDDHARTHA GAIROLA

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EDUCATION

International Institute of Information Technology, Hyderabad *Hyderabad, India*
Dual Degree BTech and MS by Research in CSE *2014 - 2019*
Overall GPA: ***8.98 /10***

St. Joseph's Academy *Dehradun, India*
Senior Secondary, ISC; Average: ***93.6%*** *2012 - 2013*
Secondary, ICSE; Average: ***95.28%*** *2010 - 2011*

WORK EXPERIENCE

Adobe Inc. June 2019 - present
Research Intern

· Working as a Research Intern in the **Media and Data Science Research Team** under Balaji K.
· Implemented a Deep Learning model in *Python, Pytorch* to perform **Few shot Guided Segmentation** on images.

IIIT Hyderabad May 2016 - May 2019
Undergraduate Research

· Honours at Center for Visual Information and Technology.
· Worked under Prof. P.J. Narayanan in Computer Vision, Machine Learning and Deep Learning.

IIIT Hyderabad August 2016 - May 2019
Teaching Assistant

· Teaching Assistant for the following courses - *Digital Logic and Processors, Artificial Intelligence, Digital Image Processing, Computer Vision and Graphics.*
· The duties involved taking regular tutorials, setting up questions for assignments and conducting evaluations.

Google Summer of Code May 2017 - Aug 2017
Summer Internship

· Got accepted as a developer for Google Summer of Code Program 2017 for the organization Scilab.
· Implemented a *C/C++* wrapper for Matlab MEX-API on current API Scilab.

Google Summer of Code May 2018 - Aug 2018
Summer Internship

· Got accepted as a developer for Google Summer of Code Program 2018 for a 2nd time, organization Scilab.
· Implemented a DEMO in *C/C++ and Scilab* as a working example for the MEX Library in Scilab.

PUBLICATIONS

V Kumar, D Khattar, **S Gairola** , Y Kumar Lal, V Varma (2018), "Identifying Clickbait: A Multi-Strategy Approach Using Neural Networks", **The 41st International ACM SIGIR Conference on Research & Development in Information Retrieval**, Pages 1225-1228.

S Rawat, **S Gairola**, R Shah, PJ Narayanan (2018), "Find Me a Sky: A Data-Driven Method for Color-Consistent Sky Search and Replacement", **International Conference on Multimedia Modeling**, Pages 216-228.

S Gairola, R Shah, PJ Narayanan (2019), "Unsupervised Image Style Embeddings for Retrieval and Recognition Tasks", **Winter Conference on Applications of Computer Vision *(WACV '20)***. (Submitted; this work is currently under review)

ACADEMIC ACHIEVEMENTS

Awarded the Dean's List Award for 6 semester straight for being in top 10% of the class in Monsoon 2015, Monsoon 2016, Monsoon 2017, Spring 2016, Spring 2017 & Spring 2018.

Was a member of the teams **Pendulum** and **GOAT** which qualified for the **ACM ICPC Asia Amritapuri Onsite Regionals** in 2015 and 2016 respectively.

All India Rank 2262 in **JEE Advanced 2014** (Among 150,000 students who appeared for the exam).

All India Rank 3856 in **JEE Mains 2014** (Among 1.2 million students who appeared for the exam).

TECHNICAL SKILLS

Working Knowledge	GNU/Linux, Bash, C/C++(STL), Python, Matlab, Octave, OpenCV
Software & Tools	HTML, CSS, JS, LaTeX, Excel
Deep Learning Frameworks	PyTorch, TensorFlow, Keras, Caffe
Past Experience	Java, OpenGL, WebGL, Django, Web2py

PROJECTS

Hostel Portal: Developed a hostel management portal using python, Web2py framework. *Spring 2015*

Linux C-Shell: A linux like terminal implemented using *C* language using different concepts like fork, signals, exec, piping. This was part of Operating System (OS) course.*Monsoon 2015*

P2P File Sharing: Developed an application layer file transfer protocol with support for TCP. It included features such a file upload, file download and indexed searching. (Computer Networks course) *Spring 2016*

AI Bot: Designed a computer bot to play the a modified version of Tic-Tac-Toe game.Using a Mini max algorithm and alpha-beta pruning *Spring 2016*

2D Game: A 2 dimensional shooting game developed using *OpenGl C++*. *Spring 2016*

3D Game: A 3 dimensional game developed using *OpenGl C++*(GLFW library). *Spring 2016*

High Dynamic Range Images: HDR imaging - generating images with a greater range of luminance levels than which can be achieved by taking only a single photograph with a fixed exposure. Using tone mapping, high-boost filtering and bilateral filtering for improvements. *Monsoon 2016*

Wiki-Search Engine: Implementation of an efficient and scalable search engine on Wikipedia dump in *Python*. Retrieve top relevant documents based on input query. Handled field as well as phrase queries. Documents were re-ranked based on tf-idf measure. For fast retrieval used threading and multi-level indexing. *Monsoon 2017*

PROGRAMMING AND OPEN-SOURCE

Programming: Take part actively in competitive programming contests.
Codechef (handle: sidgairo18)
Codeforces (handle: sidgairo18)

Open-Source: Contribute to open source actively. Have made contributions to open source organizations like **Scilab, LibreOffice and CCExtractor**. (**Github profile** : sidgairo18)

RELEVANT COURSES

Core Courses
Computer Programming
Data Structures
Algorithms
Operating Systems
Database Systems
Artificial Intelligence
Statistical Methods in AI
Advanced Computer Networks
Information Retrieval & Extraction

Other Courses
Linear Algebra
Discrete Mathematics
Complexity and Advanced Algorithms
Computer System & Organization
Digital Image Processing
Computer Vision
Principles of Information Security
Systems and Network Security
Topics in Information Retrieval