Yashasvi Baweja

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Interests Computer Vision, Biometrics, Pattern Recognition, Aritficial Intelligence & Internet of Things

Education

Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi)
Bachelors of Technology, Computer Science (2015 - 2019) CGPA: 8.27/10.0

Gyan Bharati School, New Delhi
Senior School (2013 - 2015) Score: 95%

Work Experience

IIIT-Delhi *Undergraduate researcher*, IAB Lab, May'17 - Present
Advisers: Dr. Richa Singh and Dr. Mayank Vatsa
Currently working on an extension of the famous Triplet Loss to incorporate heterogenous face recognition using metric learning. Working with images from different domains like VIS-NIR or high-low resolution image pairs.

Indian Institute of Technology, Mandi *Summer Research Intern*, May'17 - July'17
Adviser: Dr. Varun Dutt
Made landslide prediction models for Mandi-Manali route by applying machine learning algorithms. Used data pre-processing techniques like random oversampling and SMOTE to reduce the problem of class imbalance. Developed an Arduino based real time landslide monitoring weather station which is currently in deployment.

VlinkInfo Pvt. Ltd., Gurugram *Summer Intern*, June'16 - July'16
Worked on revamping the online human resource management platform using tools like PHP, Codeigniter and MySQL.

Projects

· *Smart Glasses* - A reading tool for the visually impaired made using OpenCV and Tesseract-OCR. Got selected in top 10 course projects and also got featured in Delhi-Mini Maker Faire.
· *Periocular Recognition* - A recognition system for the periocular region made using features like Local Binary Patterns, Histogram of Oriented Gradients & Scale Invariant Feature Transform.
· *Multi-Heuristic A* (MHA*)* - A comparison of the performances of search algorithms - MHA* and A* on various use cases. Code at Github.

All projects at yashasvi97.github.io/projects.html.

Software Skills TensorFlow, PyTorch, OpenCV, MATLAB, scikit-learn, Arduino, LaTeX, Git, Linux
Python, C, C++, Java

Publications

A Comparison of Class Imbalance Techniques for Real-World Landslide Predictions; Kapil Agrawal, **Yashasvi Baweja**, Deepti Dwivedi, Ritwik Saha, Prabhakar Prasad, Shubham Agarwal, Sunil Kapoor, Pratik Chaturvedi, Naresh Mali, Venkata Uday Kala and Varun Dutt. *Presented the work at International Conference on Machine Learning and Data Science - December 2017*

Awards & Recognition

· Got recognition letter from MHRD for overall performance in class XII examinations
· Manav Sthali Maths Olympiad - Bronze Medal

Extra-Curricular

Tennis Coordinator for the year (2017-2018) and member of the Sports Council.
Public Relations & Infrastructure Head, Building Better Villages, techfest Esya'16
Class Representative for Btech'15 and also a member of the Student Senate (2015-2016)