SAUMYA RAWAT

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TECHNICAL STRENGTHS

Computer Languages	C/C++, Python, Java, MATLAB, OpenCV, TensorFlow, Caffe, PyTorch, SQL
Software & Tools	Linux, HTML, CSS, Unity3D, AngularJS, Ruby On Rails, Bash, LaTeX, CPLEX

EXPERIENCE

Magic Leap Summer, 2019
Computer Vision Intern

· Worked as a part of the Object Recognition Team, on a novel 3D Semantic Segmentation architecture for indoor scenes using 3D point clouds leveraging geometric and color features. (Tensorflow, Python)

University of Maryland
Research Assistant under Dr. Rama Chellappa *Spring 2019 - Current*

· Worked on Object Detection of vehicles in heterogeneous road traffic scenes in both day-time and night-time and under different weather conditions using Single Shot Object Detectors. (Tensorflow, Python)

42Hertz Summer, 2017
Machine Learning Intern

· Conceptualized and created a collaborative filtering recommender system for a large customer dataset with implicit feedback. Improved accuracy by 78% by specifically dealing with sparsity. (Python)

Northwestern University Summer, 2016 & Monsoon, 2017
Machine Learning Intern under Dr. Chaitanya Bandi

· Designed and developed an OCR engine for medical database documentation. (Python, Tensorflow, Android).

EDUCATION

University of Maryland, College Park *expected May 2020*
Masters in Computer Science Overall GPA 3.94

International Institute of Information Technology, Hyderabad *August 2014 - April 2018*
Honors B.Tech in Computer Science
Centre for Visual Information Technology (CVIT) Overall GPA: 8.38

PUBLICATIONS

Saumya Rawat, Siddhartha Gairola, Rajvi Shah and P.J. Narayanan, *"Find me a sky : a data-driven method for color-consistent sky search & replacement"*, International Conference on Multimedia Modeling (MMM2018) in Bangkok, Thailand.

ACADEMIC PROJECTS

Sky Generation Using GANs Research, Computer Vision

· Advised by Dr. P. J. Narayanan. Dealt with the problem of sky matching to improve photos via compatible sky generation by training Generative Adversarial Networks (Deep Neural Networks, Caffe, Python).

Restaurant Revenue Predictor Data Science

· A Machine learning model to accurately predict the annual restaurant sales implemented using an ensemble method of Random Forests, Support Vector Regression and Ridge Regression.(Python)

Semantic Aware Colour Transfer for Sky Replacement in images Computer Vision

· Implementation of Tsai. et al, SIGGRAPH16, model generates images with stylized skies by exploting visual semantics for sky editing and scene parsing. (Caffe, Matlab)

Extractive Summarization Natural Language Processing

· Implemented unsupervised summarization methods: :LexRank, TextRank, Centroid Summarization and trained RNN for Seq2Seq Encoder Decoder model. (Tensorflow, Python)