

SAURABH KULKARNI

CONTACT INFORMATION	linkedin.com/in/saurabhkulkarni2312 Portfolio: saurabhkulkarni2312.github.io	saurabhkulkarni2312@gmail.com Ph.No: +1-858-729-8148
EDUCATION	University of California San Diego, <ul style="list-style-type: none">MS. Intelligent Systems, Jacob's School of Engineering (GPA: 3.5/4)Certificate: Micro MBA, Rady School of Management, UCSDReceived grades A+ in Data Analysis grad course, A in Recommender Systems course Birla Institute of Technology and Sciences, Pilani, <ul style="list-style-type: none">BE. Electrical and Electronics Engineering (GPA: 8.35/10)	
WORK EXPERIENCE	Graduate Intern, IgrenEnergi, Inc Aug 2016 - Dec 2016 <ul style="list-style-type: none">Implemented predictive models to predict power for PV array using weather data, solar data, panel characteristics and shading patterns in Python. Undergraduate Intern, Intel July 2014 - Dec 2014 <ul style="list-style-type: none">As part of Intel's telematics team, I performed sensor-fusion by combining 3 sensor data: accelerometer, gyro and speedometer to predict real time g-force in 3-dim and implemented a rudimentary inertial navigation system.Implemented a pilot system on a Raspberry Pi platform using Python.	
RECENT PROJECTS	Predictive Modelling for Insurance Claim Approvals <ul style="list-style-type: none">Implemented an end-to-end R-based data solution to classify 114000 insurance claims in an unclean imbalanced dataset with 133 variables. Performed data cleansing and explorations to visualize data identify important features.Predicted class probability using logistic regression, Random Forest, XGboost and compared performance. Achieved a logloss score of 0.456 using xgboost. Amazon Reviews Recommender System <ul style="list-style-type: none">Built a recommender systems to make ratings predictions and estimate review helpfulness for a given database of Amazon reviews.Ratings prediction was performed using linear models and latent factor models using alternating LS and achieved a 28% MSE improvement over baselinesImplemented GradientBoostedTrees to estimate helpfulness rating to improve MAE Image Segmentation using Probabilistic Techniques <ul style="list-style-type: none">Performed object segmentation from given image using different learning techniques - Maximum Likelihood, Bayesian Estimation, Mixture models using EM.Improved classification performance, achieved dimensionality reduction from ML model to EM Handwritten Digit Classification <ul style="list-style-type: none">Performed digit recognition using various techniques: bayesian estimation, gradient descent using softmax and feed-forward multi-layered neural net with backprop in Python. Optimized performance for different learning rate, network topology, activation functions batch size.Achieved a best accuracy of 96.8% on the Neural Net. Transfer Learning using Convolutional Neural Nets <ul style="list-style-type: none">Implemented classification on CalTech 256 and UrbanTribes Datasets using a VGG16 CNN Model, using Keras-Tensorflow on Python.	
RELEVANT SKILLS AND LEADERSHIP	Languages and Tools: Python, R, SQL, MATLAB, Spark, C, Linux, Git Libraries: Numpy, Scipy, Sklearn, Pandas, Seaborn, Keras, Tensorflow Coursework: Principles of AI: Probabilistic Reasoning, Statistical Learning, Exploratory Data Analysis, Recommender Systems and Data Mining, Neural Networks, Random Processes Concepts: Linear Models, Bayesian Statistics, Random Forest, Boosting, Clustering, PCA Leadership: Led a team of 3 TAs and 8 tutors as head teaching assistant at UCSD. Conducted weekly tutoring sessions for a class size of 120 students	