# SHRESTHA MALIK

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#### **EXPERIENCE**

## Software Engineer, Intel Corporation Limited, San Diego, CA

Since April 2017

Part of the research and development team for prototyping solutions in the connected devices, automotive space

- · Enabled novel healthcare and auto use cases by applying machine learning and computer vision algorithms. Experience with LSTM, CNN and object detection models
- · Designed and implemented video stream analyzer feature, which processes the camera feed by applying computer vision and CNN classification model and updates the database, integrated in a multithreaded, multi-tiered client server framework developed in C++
- · Implemented the Tensorflow object detection pipeline in C++ to achieve runtime efficiency
- · Developed a pixel labeler tool with user-friendly GUI to record points-of-interest on image to enable semi-automatic data generation for image pre-processing
- · Recognized multiple times for my contributions via the "Recognition at Intel" program

# Data Science Intern, Source Intelligence, San Diego, CA

July 2016 -September 2016

- · Designed a machine learning model to predict user-interest from invite data, to enable a more targeted workflow
- · Carried out extensive data wrangling, web scraping, cleaning and transformation of data, for feature extraction
- · Achieved a recall of 70% and provided actionable data insights for business

#### **EDUCATION**

# University of California, San Diego, USA

March 2017

Masters in Computer Science, GPA: 3.77/4

### Xavier Institute of Management, Bhubaneswar, India

March 2012

Post Graduate Diploma in Business Management (MBA), GPA: 5.86/8

# Nirma Institute of Technology, Ahmedabad, India

May 2008

Bachelor of Technology, Electronics and Communication, GPA: 8.67/10

### TECHNICAL STRENGTHS

Skills Software Development, Object Oriented Programming, Machine Learning, Computer Vision

Programming Languages: Java, Python, C++, MATLAB

Tools: Tensorflow, Neon, Caffe, Python GUI, OpenCV, SQL, MongoDB

Courses Algorithms, Operating Systems, Probabilistic Reasoning, Machine Learning, Data mining

Image Recognition using Neural Networks, Multiview Geometry, Distributed Systems

## ACADEMIC PROJECTS

· Distributed File System Java

Implemented the Remote Method Invocation library and developed a simple distributed filesystem using it

· Amazon Books Dataset Python

Mined Amazon Books' data to extract features and predict the helpfulness of reviews

Applied collaborative filtering and latent-factor modeling to predict rating of a book by an user

· Facial Expression Recognition Python

Built a convolutional neural network that achieves an accuracy of 65% on the Kaggle Dataset FER-2013, matching the human accuracy of  $65 \pm 3\%$ 

· Yelp Rating Prediction from Review Text Python

Explored text mining techniques (bag of words, topic modeling) to predict rating of a restaurant

Analyzed geographical and temporal trends and clustered users with similar tastes to enable recommendation

· Web Applications Html, CSS, JavaScript, jQuery, AngularJS, Bootstrap

Designed and built my web portfolio from scratch