SHRESTHA MALIK

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EXPERIENCE

Intel Corporation Limited Since April 2017
Software Engineer *San Diego, CA*

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

- Research, train and test neural networks (CNNs) for computer vision applications. Delivered models for 360° camera landmark detection and smart parking prototypes
- Designed and implemented the software pipeline for performing real-time inference on live video stream for classifying multiple parking spots in the camera view (C++)
- Contributed to the development of parking manager framework: configuring the spatial attributes of parking lot, interfacing with MongoDB database and deploying a multi-threaded inference pipeline (C++)
- Built a pixel labeling tool with user-friendly GUI to record points-of-interest on image to enable semi-automatic data generation for image pre-processing (Python)
- Ported the Tensorflow object detection inference code from python to C++ to achieve run time efficiency
- Recognized multiple times for my contributions via the "Recognition at Intel" program

Source Intelligence July 2016 -September 2016
Data Science, Intern *San Diego, CA*

- 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: C++, Python, Java, MATLAB
Tools: Caffe, Tensorflow, 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
- **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