Developed CNN classifier for 133 dog breeds classes using bottleneck features from a pretrained Xception model.

Used OpenCV's implementation of Haar feature-based cascade classifier to detect human faces in input images.

# HARSHIT GUPTA

San Jose, California | hrgupta@outlook.com | LinkedIn | O GitHub

School of Information Sciences, University of Illinois at Urbana-Champaign, USA Candidate for Master of Science in Information Management. Thadomal Shahani Engineering College, University of Mumbai, India

Graduated as Bachelor of Engineering in Computer Engineering with First Class.

#### SOFTWARE SKILLS

EDUCATION

- Programming Languages/Tools: Java, Python, MySQL, R, HTML, CSS, JavaScript, Boto3, Git, Docker
- Cloud Technologies: AWS EC2, S3, VPC, ECS, RDS, Spark MLlib •
- Libraries: NumPy, Pandas, Matplotlib, Scikit-learn, TensorFlow, Keras, Spacy
- Data Science Platforms: Jupyter Notebook, RStudio, Tableau, AWS SageMaker, Google AutoML

#### **PROFESSIONAL EXPERIENCE**

#### Synchrony Financial, Champaign, USA

#### Data Scientist Intern – Emerging Technology

- Lead the development of an NLP solution to classify suspicious merchants helping business reduce illegal transactions.
- Defined and managed tasks for the project team using Kanban agile methodology for quick prototyping and deployment.
- Migrated millions of merchant's data on the AWS RDS MySQL database service reducing bottlenecks in processing data. •
- Developed Spark ML pipelines to label raw datasets to achieve better performance and reduce time for model evaluation.
- Compared multiple SVM models on AWS SageMaker with the best model achieving 95% validation dataset accuracy. Developed data pipelines to scrape merchant's data from the web into existing dataset to select better predictive features.

## Syngenta Digital Innovation Lab, Champaign, USA

Data Science Technology Intern

- Lead the process of designing and implementing the architecture of data science platform on AWS cloud.
- Developed python library to connect to private data repositories and create ML environments for quick experimentation.
- Delivered an MVP by implementing ML use cases reducing time to implement data science solutions by 30%.
- Recommended incorporating AutoML features to the cloud solution saving business more than \$100k in annual costs.

#### School of Information Sciences, UIUC, Champaign, USA

Graduate Research Assistant

- Research focused on factors affecting data quality and how scientists make data quality judgment in their field.
- Conducted semi-structured user interviews of scientists based on research questions centered on data quality.
- Analyze interview data using grounded theory to understand the way data are perceived in the scientific community.
- Findings aimed to guide policy decisions in generation and utilization of quality datasets in scientific field.

#### Research IT Technology Services, UIUC, Champaign, USA

Data Analyst

- Developed web analytics reports and dashboards using machine data generated from AWS Beanstalk environment.
- Explored Splunk integration with external tools for indexing and visualization of search queries and marketing insights.
- Devised a strategy to integrate data from different sources for user analytics using Splunk Enterprise.
- Used Splunk Machine Learning Toolkit (MLTK) to develop models for anomaly detection, user clustering and web analytics.

#### Accenture, Mumbai, India

#### Application Development Associate

- Developed analytics solution to automatically generate business KPIs reducing response time for business decisions.
- Increased efficiency of business services by 20% by writing bash scripts to automate data processing and management.
- Improved internal tools such as system dashboard and logs management with new features reducing manual processing.
- Developed web integrating tool used by project teams to increase cross collaboration increasing productivity by 25%.

#### ACHIEVEMENTS/CERTIFICATIONS

- Won Best Intern Award in "Best Technological Innovation" at Research Park Summer Intern awards.
- Awarded "Six-Sigma Yellow Belt" certificate for developing analytics solution and increase customer engagement.
- Completed Udacity's 'AI Product Manager' and 'Neural Network Foundations' Nanodegree.

#### PROJECTS

#### Adversarial Analysis of Google AudioSet

- Implemented multi-level attention model to predict multi-labels of audio sounds for Google AudioSet.
- Compared the impact of Siren attack adversarial technique on the performance of different machine learning models.

# **Indian Scriptures Dataset**

- ٠ Created a structured dataset of Indian scriptures by crawling web using Scrapy framework for text mining and NLP.
- Wrote notebooks to clean and organize raw dataset into individual files for efficient training and modeling.

#### **Dog Breed Classifier**



## May 2019 - July 2019

Jan 2019 – Present

Oct 2019 – May 2020

# Apr 2019 – July 2019

Nov 2016 - Jan 2018

May 2016

May 2020