

AALISHA DALAL

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Education

University of California, Los Angeles

Master of Science in Computer Science; GPA: 3.88

Sep 2018 - June 2020

Relevant Coursework: Computer Vision (F. Scalzo & A.Kadambi), Pattern Recognition(S. Zhu), Machine Learning(Q. Gu), Deep Learning, (J.Kao), Convex Optimization (L.Vandenberghe), Natural Language Processing & Web Information Systems (J. Cho)

Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), India

B.Tech in ICT with Hons. in Computational Science; GPA: 3.75

2014 - 2018

Relevant Coursework: Neural networks, High Performance Computing, Data Structures, Object Oriented Programming

Technical Skills

Languages: Java, Python, C, C#, MATLAB

Web technologies: HTML, CSS, REST API

Platform/Framework: Pytorch, TensorFlow, CUDA, AWS, Spark

Data Stores: ElasticSearch, SQL, Hadoop

Experience

Adobe Inc.

San Jose, CA

Machine Learning Engineer

July 2020 - Present

- Worked on deploying ML-based ranker using AI engine for style-based recommendations of user photos.
- Created data pipelines using Hadoop, AWS, and Spark to analyse billions of user assets for training ML models.
- Carried out user-behavioral studies for search and recommendation use cases for Creative Cloud (CC) Products.
- Organised ML Reading Group and received “Most Likely to Be Neural Filter” Award in org-wide hackathon.

Adobe Inc.

San Jose, CA

Machine Learning Applied Search Intern

June 2019 - Sep 2019

- Generated personalised search keyword recommendation queries based on user photos in Adobe Lightroom.
- Automated categorisation of user photos in albums using an unsupervised embedded topic modelling approach.

Morgan Stanley Advantages Services Pvt. Ltd.

Mumbai, India

Technology Analyst Intern

May - July 2017

- Developed a multi-threaded Java-Spring application to monitor functionalities of different trading products.
- Created dashboard visualisations for targeting failure events of these functionalities in real-time.

University of California Los Angeles (Graduate Student Researcher)

Sep 2019 - June 2020

- **Computational Machine Learning Lab:** Created a framework to generate adversarial examples that can fool any kind of object detection models using black-box query limited Sign-OPT attack under the guidance of Prof. Hsieh.
- **UCLA Vision Lab:** Created models inspired from Siamese Network with deep cross correlation and attentional features for video instance segmentation under the guidance of PhD student Xinzhu Bei and Prof. Stefano Soatto

University of California Los Angeles (Graduate Teaching Assistant)

Jan 2019 - Mar 2020

- Conducted discussions to review lectures and labs to teach practice problems, held office hours for solving queries.

Selected Projects

- **Automated Colorisation of Grayscale Images:** Implemented a CNN encoder-decoder architecture and GAN model having U-Net as the generator and CNN as the discriminator for colorisation of grayscale images.
- **Human Face detection using Boosting:** Implemented Viola Jones' Adaboost and RealBoost method for face detection. Used non-maximum suppression and hard negative mining to reduce false-positive detections.
- **Image Analysis of Human Faces and Gender-based Classification:** Implemented PCA and auto-encoder CNN model on human faces and used them to reconstruct human faces with appearance and geometry variations. Carried out gender-based classification with Fisher faces using FLD technique.
- **Neural-based System for Question-Answering on SQUAD 2.0:** Worked on a Bidirectional Attention flow model using word embeddings - GloVe, Fast-text and BERT for predicting answers to questions from paragraphs.
- **Hashtag Recommendation for Twitter tweets:** Developed a model for recommending hashtags for user tweets. It is trained on the real-time Twitter feed and is built using word2vec embeddings and clustering approaches.
- **Parkinson's disease prediction:** Implemented MLP and RBF neural network models with meta-cognitive component for predicting Parkinson's disease among patients based on their vocal and gait features.