Nidhi Davawala

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EDUCATION

University of Massachusetts Amherst *Expected grad: May'21

Masters in Computer Science

Coursework: Neural Networks, Algorithms & Systems for Data Science, Natural Language Processing*, Information Retrieval*

Dhirubhai Ambani Institute of Information and Communication Technology, India Aug'15-May'19

B.Tech in Information and Communication Technology (ICT) GPA: 8.14/10.0

Coursework: Data Structures & Algorithms, Database Management System, Software Engineering, Operating Systems

EXPERIENCE

Summer Technology Intern, Goldman Sachs New York Ongoing

· Working on the Enterprise Health Restoration Services for alert management.

· Generating interpretable user manuals from JSON workflows and integrating it across the system heath check platform.

Research Intern, Indian Space Research Organization (ISRO) May'18-Jul'18

· Implemented Wishart image classification of agricultural lands on RADARSAT-2 Synthetic Aperture Radar Data.

· Generated change map using hypothesis testing to identify the areas with significant changes over a period of time.

PUBLICATION

Change Detection Of Polarimetric SAR Data For Monitoring Of Agricultural Areas ISPRS'18

*N. Varia, **N. Davawala**, S. Chirakkal, D. Haldar, R.Ghosh, D. Putrevu* *Link to paper*

PROJECTS

Mini Search Engine Implementation

· Implemented a mini-search engine capable of handling HTTP query requests to retrieve webpages from keywords.

· Used Hadoop File Systems to store the files and corresponding URLs; Apache Spark for generating inverted index.

· Answered queries by retrieving the corresponding files stored as key-value pairs on RocksDB.

Data Visualization: Mental health in Tech

· Developed an interactive Bootstrap website for multi-view D3 visualizations of OSMI Mental Health in Tech surveys

· Performed data analysis on 3 years surveys to understand the changing trends of employee mental health in IT industry.

· Gained insights on the spread of mental disorders, evaluated the support system and made suggestions to improve it

Background modeling for foreground detection in video surveillance

· Developed a mechanism for automatic background subtraction to identify the moving objects in a video

· Generated a basis vector of background using Principal Component Analysis and Locality Preserving Projection

· Subtracted the modelled background from the test video to detect the foreground with 97.7% accuracy.

Breast Cancer Prediction

· Performed a 2 class supervised classification on real valued features of a cell nucleus

· Implemented algorithms of Logistic Regression, Decision Tree Model and Random Forest for classification

TECHNICAL SKILLS

· **Languages:** C/C++, Java, Python, PostgreSQL, MATLAB, HTML, TensorFlow

· **Certifications:** Neural Networks (NTU Singapore), AI-Search Methods for Problem Solving (IIT Madras)

LEADERSHIPS AND ACHIEVEMENTS

· Chairperson, **Women in Engineering** (WIE) Affinity Group of IEEE Student Branch, DA-IICT (2018)

· Recipient of **Scholarship for Higher Education** (SHE) by the Dept. of Science and Technology, Govt of India (2014)