Sachin Grover

Education

Current PhD Student, Computer Science, Carnegie Mellon University, Pittsburgh.

Research: Interpretability in Computer Aided Diagnosis (CAD) techniques for medical imaging

2016–2018 Masters of Science, Computer Science, University of Maryland, College Park, GPA – 4.0/4.0.

Relevant Coursework: Machine Learning, Computational Linguistics, Empirical Research Methods, Computational Genomics

2012–2016 Bachelor of Technology, Computer Science, Indian Institute of Technology, Jodhpur, GPA – 9.54/10.

Suma Cum Relevant Coursework: Algorithm Design, Game Theory, Database Management, Computer Networks,

Laude Operating Systems, Socio-Economic Networks, Health Economics

Work Experience

Summer Data Science Intern, THE NEW YORK TIMES, New York.

Worked on a project to identify and characterize evergreen articles published by the Times using the article specific timeseries characteristics

Summer Data Analyst Intern, FOCUSVISION WORLDWIDE INC, New York.

2018 • Developed a social listening tool to track overall brand health and assist marketing campaigns to assess the impact of different market research strategies

 The tool uses an assortment of text analytics technique applied on multiple data sources (pertaining to a brand) to generate interpretable actionable insights.

Research Experience

2016-2018 Graduate Research Assistant, UNIVERSITY OF MARYLAND, College Park.

Mentor: Prof. V.S. Subrahmanian

- Designed a model-agnostic explanation engine for binary classifiers to generate natural language (English) balanced explanations (evidence for and against the predictions)
- o Integrated this engine with different classifiers to come up with a behavioral model for terrorist groups

Publications

- 2019 **S Grover**, C Pulice, G Simari, VS Subrahmanian. BEEF: Balanced English Explanations for Forecasts IEEE Transactions on Computational Social Systems.
- 2019 A Horvath, **S Grover**, S Dong, E Zhou, F Voichick, MB Kery, S Shinju, D Nam, M Nagy, BA Myers. The Long Tail: Understanding the Discoverability of API Functionality IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), 2019

Awards

- 2016 Awarded President's Gold Medal (**President of India Prize**) for the best academic performance in the graduating class of 2016 among B.Tech. programs of all disciplines at IIT Jodhpur
- 2016 Awarded Chairman, Board of Governors Prize for the best academic performance in the graduating class of 2016 of B.Tech.(Computer Science and Engineering) Program at IIT Jodhpur
- 2015 Selected for the CRUISE program at the School of Computational Science and Engineering, Georgia Tech

Other Projects

- o Visual ML Explainer Designed an interface for interpretable gender and emotion recognition using LIME and P5js
- **Detecting Cyberbullying on Twitter** An ensemble of classification models to identify and categorize cyberbullying on Twitter based on Gender, ethnicity or mental health.
- Transliteration A neural network model to perform the task of multilingual transliteration.

Technical skills

Languages $\,$ PYTHON, R, SQL (Google BigQuery), JAVA, C++, MATLAB

ML Tools scikit-learn, GeoPandas, PyTorch, Keras

Big Data Apache Airflow, pySpark

Vis Tools D3js, Tableau, P5js, FabricJS

Web Tools Beautful Soup and Selenium for web scraping, HTML5, NodeJS, CSS, PHP, SvelteJS