

Suryateja B.V.

Senior Undergraduate, IIT Kanpur

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EDUCATION

BTech, Electrical Engineering
Minor, Machine Learning
IIT Kanpur, 2020 (expected)
CPI : 9.52 / 10 (after 7 semesters)

Telangana Board - Class XII
Sri Chaitanya Junior College, Hyderabad, 2016
Percentage : 98.6%

CBSE - Class X
Vidyaketan Public School, Bengaluru, 2014
CPI : 10 / 10

WORK EXPERIENCE

Research Intern, Adobe Research, Bengaluru

Supervised by Balaji Vasan and Gaurav Verma; May 2019 - July 2019; [Paper](#)

- Designed an end-to-end assistive application that generates coordinated image-text fragments from an input article to satisfy target user needs
- Used recent deep learning models to aid in causal modeling of perceptual attributes and need-based retrieval of relevant fragments
- Full Paper accepted at [ACM IUI'20](#)
- Received a Pre-Placement Offer from the Research Team

Research Intern, University of Texas at Dallas (remote)

Supervised by Prof. Vibhav Gogate; May 2018 - July 2018

- Learned chow-liu features as a prior network on NLCS dataset by computing mutual information weighted graph and constructing a maximal spanning tree
- Used soft parameter tying to bias structure towards sparsity

PROJECTS

Advances in Recommender Systems, Course Project

Supervised by Prof. Piyush Rai; Jan 2019 - April 2019; [Presentation](#)

- Modeled user-exposure and incorporated item-item co-occurrence matrix to learn robust embeddings
- Explored ways to tackle cold-start and incorporate fairness using constrained multi-arm bandits

Explainable Machine Learning, Course Project

Supervised by Prof. Piyush Rai; July 2018 - Nov 2018; [Presentation](#)

- Create neuron groups using non-negative matrix factorization to visualize InceptionV2 features
- Compared the features of original and adversarial images generated using L_∞ -BFGS method

Stock Market Prediction, Credit Suisse ML Hackathon

Supervised by Prof. Sandeep Shukla; May 2018 - June 2018; [Presentation](#)

- Feature engineered historical stock data listed in NSE and implemented time-series LSTM in Keras to predict top 50 performing stocks of the next day
- Part of a three-member team that secured [third place](#) in National Finals among top 15 teams

SongTrain, code.fun.do Hackathon, Microsoft

Mar 2017 - May 2017; [Demo Video](#)

- Developed a Django-based web application that generates karaoke of uploaded songs and assesses the user's singing abilities by plotting and comparing realtime frequency graphs
- Part of a three-member team that secured [first place](#) in National Finals among 37 teams from top 15 IITs

ACADEMICS

Teaching Assistant

CS202: Mathematical Logic

CS203: Probability; 2020-current

Academic Excellence Award

Among 850 students; 2016-18

AIR 2369, JEE Advanced 2016

Among 1.5 lakh students; June 2016

AIR 166, JEE Mains 2016

Among 15 lakh students; May 2016

SKILLS

C, C++, Python, JavaScript, Keras, Django, Shell Utilities, R, Git

VOLUNTEERING

Member, Core Team Guidance

Counselling Service; 2018-19

Secretary

Programming Club; 2017-18

Academic Mentor (Maths)

Counselling Service; 2017-18

OTHER PROJECTS

Time-series Clustering, [Code](#) and [Report](#)

Implemented the mixture of ARMA model in Python and selected parameters using BIC

Pulse Oximetry, [Presentation](#)

Build a heart rate monitor using Arduino Nano

Exoplanet Detection, [Code](#) and [Report](#)

Detecting exoplanet containing stars in highly imbalanced Kepler Light Curve data

Technical Dialog Chatbot, [Demo Video](#)

A retrieval-based, short conversation, closed domain chatbot using Dual Encoder LSTM network