

# Suryateja B.V.

Senior Undergraduate, IIT Kanpur

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## EDUCATION

BTech, Electrical Engineering  
IIT Kanpur, 2020 (expected)  
CPI : 9.53 / 10 (after 6 semesters)

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

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

## WORK EXPERIENCE

May 2019 - July 2019 **Research Intern, Adobe Research, Bengaluru**  
Supervised by Balaji Vasan and Gaurav Verma

- Designed a holistic assistive application that generates coordinated multimodal fragments from an input article to satisfy target user needs
- Used a plethora of recent deep learning models to aid in causal modeling of perceptual attributes and retrieval of relevant fragments

May 2018 - July 2018 **Research Intern, University of Texas at Dallas (remote)**  
Supervised by Prof. Vibhav Gogate

- Learned chow-liu features as prior network on NLCS dataset by computing mutual information weighted graph and constructing a maximal spanning tree
- Used a novel regularization scheme called Quantization with annealing schedule to bias structure towards sparsity

## PROJECTS

Aug 2019 - Present **Dynamic Recommender Systems, Undergraduate Project**  
Supervised by Prof. Piyush Rai

Mar 2019 - April 2019 **Pulse Oximetry, Course Project**  
[Presentation](#) Apply the principle of photoplethysmography to build a heart rate monitor using Arduino Nano

Jan 2019 - April 2019 **Advances in Recommender Systems, Course Project**  
[Presentation](#) Model user-exposure and incorporate item-item co-occurrence matrix to learn robust embeddings

Aug 2018 - Nov 2018 **Explainable Machine Learning, Course Project**  
[Presentation](#) Create neuron groups using non-negative matrix factorization to visualize InceptionV2 features

May 2018 - June 2018 **Stock Market Prediction, Credit Suisse ML Hackathon**  
[Presentation](#) Part of a three-member team that secured **third place** in National Finals among top 15 teams

Nov 2017 - Dec 2017 **Exoplanet Detection, Inter IIT Tech Meet, IIT Madras**  
[Code and Report](#) Detecting exoplanet containing stars in highly imbalanced Kepler Light Curve data using signal processing

Mar 2017 - May 2017 **SongTrain, code.fun.do Hackathon, Microsoft**  
[Demo Video](#) Part of a three-member team that secured **first place** in National Finals among 37 teams from top 15 IITs

May 2017 - Jul 2017 **Technical Dialog Chatbot, Programming Club, IIT Kanpur**  
[Demo Video](#) A retrieval-based, short conversation, closed domain chatbot using Dual Encoder LSTM network

## ACADEMICS

2016 - 2018 **Academic Excellence Award**  
Among 850 students

June 2016 AIR 2369, JEE Advanced 2016  
Among 1.5 lakh students

May 2016 AIR 166, JEE Mains 2016  
Among 15 lakh students

## SKILLS

Languages C, C++, Python, JavaScript

Development HTML, CSS, Django

ML Libraries Keras, Numpy, Pandas

Miscellaneous Shell Utilities, R, Git

## VOLUNTEERING

May 2018 **Member, Core Team Guidance**  
- May 2019 *Counselling Service*

July 2017 **Secretary**  
- May 2018 *Programming Club*

April 2017 **Academic Mentor (Maths)**  
- May 2018 *Counselling Service*

## RELEVANT COURSEWORK

### Computer Science

Data Structures and Algorithms I & II  
Probabilistic Modeling and Inference  
Introduction to Machine Learning  
Computer Organisation

### Electrical Engineering

Communication Systems  
Control Systems  
Digital Electronics

### Mathematics and Humanities

Probability and Statistics  
Linear Algebra and Multivariable Calculus  
Ordinary and Partial Differential Equations  
Time Series Analysis (\*)  
New Media Theory  
Behavioral and Experimental Economics  
Urban Habitat Studies (\*)

\* - Ongoing Courses