

## EDUCATION

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- **Indian Institute of Technology, Kanpur** Kanpur, India  
*Bachelor of Technology, Civil Engineering; GPA: 7.81/10.00* *July 2016 – May 2020 (Exp.)*
- **Delhi Public School, Kalyanpur** Kanpur, India  
*All India Senior School Certificate Examination, CBSE; Percentage: 95.8%* *May 2016*
- **Delhi Public School, Kalyanpur** Kanpur, India  
*All India Secondary School Examination, CBSE; GPA: 10/10* *May 2014*

## RESEARCH EXPERIENCE

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- **Travel Behaviour Analysis of India** IIM Ahmedabad  
*Research Intern, mentored by Prof. Sandip Chakrabarti* *May 2018 - July 2018*
  - Manipulated and analyzed **Census-2011** data to study the **work commute** and **travel behavior** of people across India, district-wise.
  - Analyzed the overnight travel data from **NSSO's 72nd Round of Survey** to explore the district-wise **medical tourism** trends across India.
  - Assisted in the conduction of the **National Capital Region: Travel Survey** to determine the **modal choice** of working population.
  - Used **R** libraries **dplyr**, **ggplot2** and **psych** for data analysis and manipulation.

## KEY PROJECTS

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- **Highway Accidents' Parameter Determination** *Dec 2018 - Ongoing*  
*Prof. Vineet Kumar, Yale School of Management, New Haven, CT, USA*
  - Using Deep Learning approaches like **Convolutional Neural Networks (CNNs)** to determine which features of roadways cause more accidents.
  - **Google's Maps** and **Routes API** will be utilized to extract data in the form of satellite images of various highway intersections and exits.
  - This project is a **work in progress**.
- **Automation of Linguistic Category Model** *Aug 2018 - Oct 2018*  
*Prof. Aruna Divya T., Indian Institute of Management (IIM) Ahmedabad*
  - Automated the classification of **State Action Verbs** based on **Linguistic Category Model (LCM)** proposed by **Semin** and **Fiedler**.
  - Implemented the algorithm developed by **Reyt et al. (2016)** to classify Yelp reviews based on their **construal level**.
  - Merged the **WordNet** and **SentiWordNet 3.0** databases to read the code for each word and its corresponding SynSets.
- **Home Credit Default Risk** *July 2018 - Aug 2018*  
*Open Kaggle Challenge, Home Credit Group*
  - **Classified** loan applicants based on their capability of repaying a loan based on their current financial status and previous history of loans.
  - Used methods such as **Gradient Descent** and **Bayesian Optimization** to conduct a guided search for the best hyperparameters.
  - Applied Python libraries **NumPy**, **Pandas**, **Scikit-Learn**, **LightGBM**, **Hyperopt**, and **Matplotlib** to arrive at the final result.
  - Achieved a **ROC-AUC score** of **0.77** (Competition Winner: 0.81) in the final evaluation of the model.

## RELEVANT COURSEWORK

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Probability & Statistics	Introduction to Programming	Linear Algebra and ODE
Applied Psychology	Geoinformatics	Computational Methods
Foundations of Finance (U)	Investment Philosophy* (O)	

*U: Registered for Spring Semester, O: Ongoing, \*: Audited MOOCs*

## SKILLS

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- **Languages** : C++/C, Python, R
- **Software and Utilities** :  $\text{\LaTeX}$ , Stata, Jupyter Notebook, MATLAB
- **Operating Systems** : macOS, Windows

## ACHIEVEMENTS

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- Ranked among **top 15%** in Kaggle's **Digit Recognizer:MNIST** Challenge with an accuracy of **99.6%** *2018*
- Ranked among **top 5%** in Kaggle's **Titanic Survival Classification** Challenge *2018*
- Ranked among **top 3%** out of **200,000** students in JEE Advanced 2016 *2016*
- Secured **All India Rank 198** in National Science Olympiad (SOF) *2014*
- Secured **International Rank 805** in International Mathematics Olympiad (SOF) *2014*
- Won multiple **National Level** Inter-College and Inter-School Quiz Competitions *2015-2018*

## POSITIONS OF RESPONSIBILITY

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- **Coordinator** Quiz Club, IIT Kanpur *April 2018 - Present*
- **Proctor** World Quizzing Championship, Kanpur Leg *June 2017*
- **President** Quiz Club, DPS Kalyanpur *Aug 2015 - March 2016*

## ACADEMIC REFERENCES

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### **Prof. Sandip Chakrabarti**

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Indian Institute of Management Ahmedabad  
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