# EDUCATIONAL QUALIFICATIONS

YEAR	DEGREE	INSTITUTION	CGPA/%
2013-2018	B.SM.S.: Department of Economic Sciences	Indian Institute of Technology Kanpur	UG-8; PG-8.5
2012	CBSE XII: AISSCE	Shree Kasera Bazar Vidya Niketan	90.6%
2010	CBSE X: AISSE	New Digamber Public School	9.8

### SCHOLASTIC ACHIEVEMENTS

• Offered a role of consultant by <b>J-PAL SA(South Asia)</b> region for working on Bihar Electricity Project	Jun'17
• Awarded a placement offer from Futures First with a package worth INR 10.5 lacs	Dec'16
• Secured All India Rank <b>2884</b> in <b>IIT JEE</b> Advance among 1.6 million applicants	2013
• Recipient of <b>GATE</b> scholarship worth <b>INR 1.48 lacs</b> for MS research and assistantship	2017-18
• Recipient of Merit-cum-Means (MCM) scholarship worth INR 3.2 lacs for meritorious academic performance	2013-2017

#### MASTER'S PROJECT

- Resource Use Efficiency of Wheat Production: A Data Envelopment Analysis (DEA) (Aug'17-Jun'18)
  - Analysed primary agricultural data pertaining to 295 farmers of Bhadohi, Chandauli and Fatehpur districts of Uttar Pradesh
  - Employed **DEA-LP** (Linear Programming) to calculate Input-Oriented, Output-Oriented, Input-Specific technical efficiency
  - Computed non-radial Pareto-Koopmans and Graph Hyperbolic measure of technical efficiency using Taylor-series approximation
  - Estimated Nitrogen fertiliser as most inefficiently used input in relation to cultivated land, seed and labour expense

#### INTERNSHIPS

## • Montpellier Business School, France | Research Assistant | Mentor: Dr. Aviral Tiwari

- Impact of Information Communication Technology (ICT) on Labour Productivity: A Panel Data Analysis
  - Productivity: A Panel Data Analysis
  - $\ast\,$  Analysed panel data from 2000-2015 for 98 countries grouped as low, middle and high income countries
  - \* Applied fixed and random effect model in STATA based on result of Durbin-Wu-Hausman test on pooled and grouped data
  - \* Found telephone users for low and internet users for middle, high income countries to have positive impact on productivity
- Impact of Information Communication Technology and Globalisation on  $\mathrm{CO}_2$  emissions
  - \* Employed panel Granger causality test in Eviews to find causal relationship among variables for policy recommendations
  - \* Spotted bidirectional causality between globalisation and CO<sub>2</sub> emissions, unidirectional causality from ICT to CO<sub>2</sub> emissions
  - \* Concluded globalisation has a negative impact whereas ICT has positive impact on CO<sub>2</sub> emissions using fixed effect model
- Edelweiss Financial Services Limited, Mumbai | Quantitative Analyst

(May'16-Jun'16)

(Jun'17-Jul'17)

- Implemented **Principal Component Analysis** in python for NSE data to find directions of maximum variance
- Evaluated correlated pairs of stock by selecting pair with least L2 norm in directions found using PCA
- Cross validated screened pairs using **co-integration test** on historical price data of last quarter
- Analysed returns of diversified portfolio by trading on historical price data of last quarter

## ACADEMIC PROJECTS

## • Impact of Inflation and Investment on Economic Growth, Dr.Somesh Mathur, Economics, IIT Kanpur (Dec'15-Apr'16)

- Employed econometric models like fixed effects and random effects model on panel data of 39 countries from 1960-2013
- Instrumented investment to GDP and life expectancy variables with their lagged values in order to deal with endogeneity
- Observed that Inflation show negative association and investment to GDP show positive association with economic growth
- Predicting the word from Brain Activity, Dr. Piyush Rai, Computer Science, IIT Kanpur (Sep'16-Nov'16)
  - Aimed to predict the word subject is thinking from a choice of two words by using fMRI for 300 subjects
    Implemented Ridge Regression in MATLAB to correlate brain activity with semantic features and attained 73.33% accuracy
  - Employed feature selection algorithm Lasso to reduce the number of independent variables and achieved 75% accuracy
- Impact of Credit on Development, Dr.Sohini Sahu, Economics, IIT Kanpur (Dec'15-Apr'16)
  - Analyzed Credit Market of rural households of 28 Indian states affected by irregular interest rates and trapped in debt
  - Indicated lack of awareness, illiteracy and improper implementation of the policies as major cause of growing informal credit

# RELEVANT COURSES

• Economics: Microeconomics, Macroeconomics, Econometrics, Experimental and Behavioural Economics, Environmental Economics, Production Economics, Public Economics, Development Economics, Mathematical Economics, Economic Growth theory, Empirical methods in applied microeconomics, Game theory

- Statistics: Probability and Statistics, Stochastic Process, Statistical Simulation and Data analysis, Non Linear regression
- Computing: Data Structures and Algorithms, Machine Learning Techniques, Introduction to C

#### TECHNICAL SKILLS

- Programming Languages: MATLAB, R, Python, C
- Statistical Packages and other tools: STATA, Eviews, LATEX, MS-Office, AutoCAD

#### POSITIONS OF RESPONSIBILITY

- President, Hall of Residence I, IIT Kanpur,
  - Supervised staff of **70 people** to enhance work by holding weekly meetings and rewarding best performers
  - Managed budget of **INR 2.5 lacs** to organise hall celebration day 'Shubhaarambh' for 600 residents
  - Planned budget of **INR 4 lacs** for overall maintenance of hostel expenditure throughout the year
  - Reduced 20% energy consumption after installing 600+ LED tube lights worth INR 5 lacs for complete hostel

#### • Head Campus, Entrepreneurship Cell, IIT Kanpur,

- Worked with 13 membered core team to successfully conduct Entrepreneurial fest with a budget of INR 5 lacs
- Led team of 10 volunteers to conduct competitions like Pitch your product, SoCha and quizzes throughout the year
- Organised monthly Start-up 101 lecture series by young entrepreneurs to teach basics of entrepreneurship

#### EXTRA-CURRICULAR ACTIVITIES

- Taught Mathematics and Science to underprivileged children at Prayas, an Student Gymkhana's initiative, IIT Kanpur
- Secured 12th position in a 21 km Half Marathon among 200 participants organised by Adventure Club, IITK
- Completed 4200m Druk Path Trek in Bhutan in 5 days organised by Adventure Club, IIT Kanpur
- Participated in group dance at Dance Extravaganza 2016 and 2017 organised by Dance Club, IIT Kanpur

(Aug'16-Jun'17)

(May'15-May'16)