

## Bhavy Khatri

Dept. of Mathematics and Scientific Computing  
Dept. of Computer Science and Engineering  
Indian Institute of Technology, Kanpur

Phone: +91 7388 7833 17  
Email: bhavy@iitk.ac.in  
GitHub: <https://github.com/bhavykhatri>

### EDUCATION

**Indian Institute of Technology Kanpur** *2015-2020 (Expected)*  
*Bachelor of Science, Mathematics and Scientific Computing*  
*Second Major, Computer Science and Engineering*  
**Central Academy School, Alwar**  
**AISSCE(CBSE)** *CPI: 9.4\**  
*(\* - at the end of 5 semester)* *95%*

### SCHOLASTIC ACHIEVE- MENTS

- Among top 3 students from Institute who got selected for Global Project Based Learning (GPBL) 2017 at **Shibaura Institute of Technology (SIT) Japan**.
- Successfully completed Summer Undergraduate Research Grant for Excellence (SURGE) 2017, 8 weeks internship program granted by Dean of Resources and Alumni, IIT Kanpur.
- Secured **All India Rank 2548** in JEE Advanced-2015 among 1,50,000 students.

### COMPUTER SKILLS

**Languages:** C, C++, Python, Bash, SQL,  $\text{\LaTeX}$ .  
**Tools:** R, MATLAB, Git.  
**Operating Systems:** Linux, Windows.

### PROJECTS

**Social and Religious Biases in Indian Society** *May17-July17*  
*Mentored by: Debayan Pakrashi, Dept. of Economic Sciences*

- Analyzed data of 900 women in slum areas to identify effects of interaction among different groups (Religion and Caste) on their social and religious prejudices.
- Multiple Linear Regression and its estimation using Ordinary Least Square (OLS) has been used to find the association between dependent variable (y) and different independent variables.
- Results showed that working together with people from different social and religious background changes their perception. In case of both religion and caste it was getting better.

**Prediction Analysis for Australian Airlines** *Sep17-Nov17*  
*Mentored by: Dr. Wasim Ahmad (Economics), Dr. Sharmishtha Mitra (Mathematics)*

- Revenues for company are partly determined by demand from international visitors who are sensitive to currency movements.
- Found a negative correlation of Jet Kerosene (per metric tonne) price and AUD/USD which is also consistent because if AUD/USD increases, travellers would be reluctant to visit Australia and in turn the fuel price will fall due to decrease in its demand.
- Simulated 1000 paths of prices for next 12 months for both Jet Kerosene as well as AUD/USD using past 25 years data.
- Assumed bi-variate normal distribution to predict values for both random variables using random number generated between  $[0,1]$ .

**New idea for fun drive centering on young people** *Dec 17*  
*Honda R&D, Global Project Based Learning @ SIT Japan*

- Suggested ideas to make driving fun for young people who have been losing interest in automobiles.
- Used QFD(Quality Function Deployment) method to consider how to satisfy customers desire.
- Considered various requirement and KANDO quality to develop QFD.

- Chose solution with highest absolute importance value i.e. Automobile with communication based on Augmented Reality technology.
- Developed a business model in which one can decide to hang out with people driving near them.
- One can also collect virtual coins while driving and can avail discount using those coins at recreational spots.
- Revenue for the company will be generated from the recreational points such as movie theatre, hotels etc. as their names would be suggested to the driver as the destination hotspot .

## RELEVANT COURSES

Probability and Statistics  
Applied Stochastic Process  
Machine Learning  
Computational Methods in Engineering  
Macro Economics

Data Structure and Algorithms  
Randomised Algorithm  
Principles of Data Base Systems  
Computer Organization  
Financial Economics(Audit)