Aashita **Kesarwani**

AashitaK | Imaashita-kesarwani

Education

PHD IN MATHEMATICS **Tulane University**

Aug 2012 - Present

New Orleans

• Working in Number Theory. Submitted two papers. Expected to graduate by December 2017.

 Teaching assistant for the undergraduate courses – Introduction to Probability and Statistics, Statistics for Scientists, Statistics for Business, Calculus - I, II and III.

INTEGRATED MS IN APPLIED MATHEMATICS **IIT(Indian Institute of Technology)**

Aug 2007 - May 2012

Roorkee, India

- GPA 8.6 Second highest GPA among math majors.
- Courses taken:
 - Artificial Neural Networks
 - Probability and Statistics
 - Statistical Inference
 - Multivariate Techniques
 - Nonlinear Programming
- Database Management Systems
- Data Structures
- Linear Algebra
- Graph Theory
- Discrete Mathematics
- Computer Systems and Programming
- Financial Mathematics
- Operations Research
- Optimization Theory
- Mathematical Modeling

COURSERA MOOCS

Aug 2016 - Present

- Machine Learning by Stanford University
- Introduction to Data Science in Python by University of Michigan
- Applied Plotting, Charting and Data Representation in Python by University of Michigan
- Applied Machine Learning in Python by University of Michigan
- Using Databases with Python by University of Michigan
- Using Python to Access Web Data by University of Michigan
- Python Data Structures by University of Michigan
- Programming for Everybody by University of Michigan
- Capstone: Retrieving, Processing, and Visualizing Data with Python by University of Michigan

Programming

Languages

PYTHON (NumPy, SciPy, *pandas*, Matplotlib, scikit-learn, sqlite3, urllib, BeautifulSoup), MATLAB/Octave, C++, R, MySQL

Mathematica, MS-Excel, ETFX, Jupyter Notebook, Git Miscellaneous

Projects

AN SVM-cum-Decision Tree Approach to binary classification.

 A hybrid support vector machine based decision tree for binary classification was implemented in MATLAB. The tree first classified the points as far off or close to the decision boundary, and then SVM was used only for the latter points to speed up the process. Worked with Kalpna Gupta.

THE EFFECT OF RECESSION ON THE HOUSING PRICES

Jan 2017

• The hypothesis that the university towns have their mean housing prices less effected by recessions was tested. The data was obtained from the Zillow research, Bureau of Economic Analysis and wikipedia in different formats, manipulated using pandas and then tested using scipy stats.

PLOTTING RECORD TEMPERATURES FOR NEW ORLEANS

• The record highs and lows in the temperature over the period 2005-2014 was plotted as line graphs and the record breaking temperatures for 2015 was scattered over as red and blue dots using matplotlib. The data was extracted from GHCN-DAILY and manipulated using pandas.