

# Pratik Mishra

ANALYST · GOLDMAN SACHS

Bengaluru, India

☎ (+91) 7259248322 | ✉ pratikmishra001@gmail.com | 🌐 www.pratikmishra.in | 📷 pratik1105 | 📺 pratik1105

## Education

### Indian Institute of Technology (IIT) Kanpur

Kanpur, India

B.S. IN MATHEMATICS AND SCIENTIFIC COMPUTING

May 2014 - May, 2018

- Graduated with 8.5 CPI on a 10 point scale
- Academic excellence award in 2017 for outstanding performance

## Skills

**Programming** C/C++, Python, Java, Git

**Libraries** Tensorflow, Pandas, Scikit-learn, Matlab

**CourseWork** Linear Algebra, Statistics, Natural Language Processing, Optimization Techniques, Bayesian Machine Learning

## Experience

### GOLDMAN SACHS

Bengaluru, India

ANALYST

June, 2018 - PRESENT

- Worked in the Systematic Market Making team with focus on **low latency** electronic and automated trading of futures
- Built and deployed(US,EMEA,ASIA) messaging service infrastructure on top of **rabbitMQ** for high resiliency trading
- Extensive C++ development(over **10,000 lines**) that involved Proxy OOP Design Patterns and dependency injection for an end-to-end system

### FUZZY LOGIX

Bengaluru, India

SOFTWARE ENGINEERING INTERN

May 2017 - Jul 2017

- **Optimized** Linear Algebra subroutines such as Matrix Multiplication, QR-Factorization, LU-Factorization, LU-Inverse.
- Integrated open source libraries such as OPENBLAS and Industrial library such as Intel's MKL.
- Achieved **100x** performance boost compared to previous Benchmarks.

## Projects

### FUZZY LOGIX HACKATHON

Bengaluru, India

COMPUTER VISION, CONVOLUTIONAL NEURAL NETWORK

May 2017

- Developed an application that allows image search on Amazon.com
- Leveraged **Convolutional Neural Networks** for object detection.
- Used Selenium, Clarifai API to scrape amazon results using extracted key-words and computed Image similarity to produce results.

### FRAUD PREDICTION IN ENRON DATASET

IIT Kanpur

NATURAL LANGUAGE PROCESSING, NLTK, PYTHON

Jul 2016 - Nov 2016

- Employed NLP techniques and exploratory analysis to find Indicators of fraudulent behavior in Enron Emails dataset
- Implemented topic modelling using **LDA analysis** to make predictions

### RUMOR DIFFUSION IN MULTI AGENT SYSTEMS

IIT Kanpur

GAME THEORY, GRAPH ALGORITHMS, MATLAB

Jan 2017 - Apr 2017

- Studied and simulated an evolutionary model for rumor dissemination process in complex networks using graph algorithms and game theory
- The simulations were ran on Facebook New Orleans dataset and Email correspondence dataset.

### OPTICAL CHARACTER RECOGNITION

IIT Kanpur

CONVOLUTIONAL NEURAL NETWORK, TENSORFLOW

Feb 2016 - Apr 2016

- Implemented Convolutional Neural Network and **Softmax regression** using **TensorFlow**(Google library for Machine Learning) for classification of digits using the MNIST dataset.

## Achievements

2017 **ACM ICPC**, Qualified for ACM ICPC **World Finals**

India

2012 **INMO**, Finalist at Indian National Mathematics Olympiad

India