# Pratik Mishra

https://pratik1105.github.io pmishra@iitk.ac.in | +91-8960619723

# **EDUCATION**

## **IIT KANPUR**

BS IN MATHEMATICS AND SCIENTIFIC COMPUTING Expected May 2018 | Kanpur, India CPI: 8.7

#### DELHI PUBLIC SCHOOL RANCHI

Grad. May 2014 | Ranchi, India

# LINKS

Github://pratik1105 LinkedIn://pratik1105 Facebook://pratik.mishra.9

# **COURSEWORK**

#### **UNDERGRADUATE**

Linear Algebra
Abstract Algebra
Probability and Statistics
Data Structures and Algorithms
Natural Language Processing
Optimization Techniques
Databases

#### RESEARCH INTEREST

- Data Visualization
- Machine Learning
- Algorithms
- Discrete Mathematics

# SKILLS

#### **PROGRAMMING**

Comfortable:

C • C++ • Python • HTML • CSS • Git Familiar:

Pandas • Matplotlib • Scikit-learn

# EXTRA CURRICULAR

- Maintain a personal blog for compositions (LINK)
- Play Basketball, Football, Cricket, Table Tennis, Badminton

#### **EXPERIENCE**

# **FUZZY LOGIX** | SOFTWARE ENGINEERING INTERN, LINEAR ALGEBRA OPTIMIZATION

May 2017 - July 2017 | Bangalore, IN

- 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.
- Performance tests for comparison with native system optimized libraries.

#### FUZZY LOGIX HACKATHON | COMPUTER VISION

May 2017 | Bangalore, IN

- Developed an application that allows image search on Amazon.com.
- Used Selenium, Clarifai API to scrape amazon results using extracted key-words and computed Image similarity to produce results.

# **PROJECTS**

## FRAUD PREDICTION IN ENRON DATASET | CS 671

Jul 2016 - Nov 2016 | IIT Kanpur | Professor Harish Karnick | github link

- Employed NLP techniques 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** | CS 785

Jan 2017 – Apr 2017 | IIT Kanpur | Professor Harish Karnick | github link

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

#### **OPTICAL CHARACTER RECOGNITION** | PROGRAMMING CLUB

Feb 2016 - Apr 2016 | IIT Kanpur

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

# COMPETITIVE PROGRAMMING

2017 **ACM ICPC** 15th and 20th at Amritapuri and Chennai Regionals

2017 Codechef profile Maximum rating at 6\* (on a 7\* scale)
2017 Codeforces profile Maximum level reached: EXPERT

2017 Kaggle Visualizations for Basketball and Game of thrones datasets.

# **ACHIEVEMENTS**

2012 National Indian National Mathematics Olympiad (INMO) Finalist

2010 National AIR 8 in DPS Science and Maths Competition