

Prem Kumar

+91 8010552131
kprem193@gmail.com
kprem193.github.io

EXPERIENCE & INTERNSHIPS

Tata Consultancy Services, Delhi

JULY 2019 - ONGOING

Working as a special hire on projects involving the latest technologies and R&D.

Fidelity International, Gurgaon

JUNE 2018 - JULY 2018

Worked as technology intern in Innovation lab and worked on Large Deal Verification project which involved **speech to text conversion** and **feature extraction** using **deep learning**.

NIT, Delhi — Research Intern

MAY 2017 - JULY 2017

Worked on Analysis of large networks, Simulation of Epidemic and Rumor Spreading in **Complex Networks**.

PUBLICATIONS :

1. Kumar, P., Verma, P., & Singh, A. (2018). A Study of Epidemic Spreading and Rumor Spreading over Complex Networks. In *Towards Extensible and Adaptable Methods in Computing* (pp. 131-143). Springer, Singapore.
2. Kumar, P., Verma, P., Singh, A., & Cherifi, H. (2019). Choosing Optimal Seed Nodes in Competitive Contagion. *Frontiers in Big Data*, 2, 16.

MAJOR PROJECTS & RESEARCH WORKS

Research & C++: Modelling Competitive & Cooperative Diffusion over Complex Networks using Game Theory.

To design the algorithm of the dynamics in competitive & cooperative environment and to find the optimal strategies of spreading.

Research & C++: Simulation of Epidemic and Rumor on Complex Networks & Analysis of high rate of spreading of Fake news.

To design an algorithm of spreading and to know the important variables and their impact on aspects like R_∞ and survival time of the Epidemic & To understand the factors leading to rapid spread of fake news.

Deep Learning: Feature Extraction from Audio

To generate the transcripts of voice calls and extract the important features

Web Development: Eventor

To provide ease of finding the college fests or event schedules and to provide sponsors for the college events.

Machine Learning: Contest of polls using smile detection.

To take a binary input from a person in a poll using the Emotion API.

SKILLS

Programming : C, C++, bash.

Web Development : CSS, php.

Softwares & libraries : Google Cloud, MATLAB, Solidworks, GNUplot, DeepSpeech, ns2.

Problem Solving.

Critical Thinking.

AWARDS

Excellence In Education Award : By Delhi Govt.

Most Viewed Writer on Quora : Time Dilation, space-time, speed of light, gravity.

2 Gold Medals in IMO : SOF IMO 2014 & 2015.

3rd Prize in root@ctf: Capture the flag jeopardy style.

3rd prize in code golf: Online competition to write the smallest code.

Advisor at Pink City Space Quiz : Invited by Team Indus Moon Mission Team.

Quizzes: Won Ramanujan Quiz (2nd prize) and Zonal Science Quiz (1st prize) .

EDUCATION

NIT, Delhi — B. Tech, Computer Sci. & Eng.

AUG 2015 - MAY 2019

CGPA : 7.33/10.

Ramjas Sr. Sec. School, Delhi — (10+2), Science.

JULY 2013 - MAY 2015

Percentage: 93.8/100.

LANGUAGES

Hindi & English.