# Pranjal Tale

http://pranjaltale16.github.io pranjaltale16@gmail.com | (+91)-7417371585

# **EDUCATION**

# INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

Int. MSc in Applied Mathematics 2015 - 2020 (expected) Roorkee, India Cum. GPA: 7.386

#### JAWAHARLAL NEHRU SCHOOL

SENIOR SECONDARY(CBSE) Grad. May 2015 Bhopal, India

# AREAS OF INTEREST

Software Development, Deep Learning, Network Security

# **OPEN SOURCE**

CodeWorld, Sympy, Cadasta

# LINKS

Github://pranjaltale16 Portfolio://pranjaltale16 LinkedIn://pranjaltale16 Codechef://pranjaltale16

# COURSEWORK

#### **COMPUTER RELATED**

Mathematical Imaging Techniques
Database Management Systems
Linear Algebra
Design and Analysis of Algorithms
Data Structures
Machine Learning (Andrew NG,
Coursera)
cs231n (CNN for Visual recognition)

#### **MATHEMATICS RELATED**

Complex and Real Analysis Probability and Statistics Number Theory Discrete Mathematics Graph Theory Numerical Methods

# **EXPERIENCE**

# **VERNACULAR.AI** | SOFTWARE DEVELOPER INTERN

Nov 2017 - Dec 2017 | Bangalore, India

- Developed a python package to parse text into structured data. It parses temporal expressions from different languages and recognize quantities described in different ways.
- Tech-Stack: Python, Django, git

#### **CODEWORLD** | SUMMER OF HASKELL 2017

May 2017 - Sep 2017 | Work from home

- Developed a standalone executable Cabal package for source code compilation wrapped over GHCJS; added test suite for the same and regex parser for filtering the error messages. Made a custom tree parser using haskell-src-exts and syb, to check for syntax errors before compilation.
- Tech-Stack: Haskell, Javascript, Shell scripting, SNAP-framework, git

# TECHNICAL PROJECTS

#### SMP PORTAL | INFORMATION MANAGEMENT GROUP, IIT ROORKEE

- Developed an application enabling information exchange, event announcement, documents sharing between mentors, mentees and team with push notifications, aimed at fostering healthy interaction.
- Tech-Stack: Django, mysql, semantic-UI, ¡Query, django-auth, Apache2.

#### NOBEL | Information Management Group, IIT Roorkee

- Nobel is an internal Chat Room for the members of IMG, Built on NodeJs using socket.io and Semantic-UI. It helps us to check for the presence of members in the lab and communicate with them.
- Tech-Stack: Node-js, Express, Semantic-UI, pm2, vanilla js, Socket.io.

#### IMG WEBSITE | INFORMATION MANAGEMENT GROUP, IIT ROORKEE

- Worked on IMG(Information Management Group) website as a full stack developer. It consists of features like dashboard for user, admin panel, blogs etc, also, the same tries to connect alumni with team.
- Tech-Stack: Django, mysql, materializecss, jQuery, Apache2.

# ACADEMIC PROJECTS

#### **SUMMER UNDERGRADUATE RESEARCH AWARD LITT ROORKEE**

• Developed a model in MATLAB for 3D analysis of Oxygen transfer for animal cell suspension culture, mentored by Dr. Ameya K. Nayak. To study the flow field and oxygen transport in a micro bioreactor and extend the results for micro-scale.

#### **IMAGE DEBLURRING**

• Image single image deblurring using Blind Deconvolution method in MATLAB, mentored by Dr. Sanjeev Kumar.

#### LAB EXPERIENCES

• Implemented Several Algorithms in Data Structures, also incorporated advanced topics such as Segment Tree, AVL Tree, Dynamic Tree etc.

### SKILLS

#### **PROGRAMMING**

Proficient:

Haskell, Python, C++

Experienced:

LATEX PHP, CSS, Js

#### **WEB**

Django, Express, SNAP-framework

#### **UTILITIES**

Linux, GitLab, Sentry, Piwik, MySQL, Apache2, Redis, TensorFlow, scikit-learn

# LANGUAGES KNOWN

English - RSW

Hindi - RSW

# **FXTRACURRICULAR**

# ACTIVITY

Cook.

Play Guitar and Ukulele.

Cuber.

Photographer.

Astrophile.

# REFERENCES

#### DR. A. K. NAYAK

Associate Professor, Dept. of Mathematics Indian Institute of Technology Roorkee nayakfma@iitr.ac.in

# **ACHIEVEMENTS**

2017	Recipient of Summer	Undergraduate Research Av	ward (SURA) by IIT-Roorkee
------	---------------------	---------------------------	----------------------------

2017 Participated in HackDTU and successfully completed the app in 24 hours

Recipient of INSPIRE-SHE scholarship, by Government of India 2016

2016 Successfully completed the approvernight as a part of Code. Fun. Do 17

Qualified for Elimination round of Codechef SnackDown-2016 2016

2014 Awarded a Gold Medal in the school Basketball Open

2013 Selected for a to visit to HEGRO Observatory situated in Pachmari, MP

# POSITION OF RESPONSIBILITY

#### **PROJECT LEADER** | Information Management Group

Jan 2016 - Present

• IMG, (Information Management Group) is a student's group in IIT Roorkee responsible for development and maintenance of internet and intranet applications in the institute, including the website of IIT Roorkee.

#### JOINT SECRETARY | PROGRAM MANAGEMENT SECTION

Aug 2016 - Present

• Program management section is a cultural club under Cultural Council IITR, and is responsible for the conduction and management of all the events of Cultural Council smoothly.

#### **SENATE MEMBER | STUDENT AFFAIRS COUNCIL**

July 2015 - April 2016

• I have been the part of Alumni Relations Team of SAC (Students Affair Council) IIT Roorkee for the academic Year 2015-2016.

# **BRANCH REPRESENTATIVE | COGNIZANCE | IT ROORKEE**

July 2015 - April 2016

• Cognizance IIT Roorkee is the Asia's second largest technical Festival Held in March every year I have been selected as a branch representative by Cognizance IIT Roorkee for the year 2015.