

# Rishabh Pandey

BIOINFORMATICS · DATA SCIENCE · WEB DEVELOPER

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## Abstract

I am a Northeastern Husky, and I have an inclination towards machine learning and deep learning for visualization and analysis and I also love software development and I aim to land a job as a Data Scientist or a software developer/engineer.

## Education

### Northeastern University

MS IN BIOINFORMATICS

- Concentration in Data Science and Data Analytics

Boston, MA, USA

December-24

### Ramaiah University of Applied Sciences

BSc (HONS) BIOTECHNOLOGY

- 8.9/10 CGPA

Bangalore, India

August-21

## Work Experience

### IISc, Bangalore

FULL STACK WEB DEVELOPER - INTERN: RUBY ON RAILS

- Worked as a Full-stack web developer in Department of Computational and Data Science, Indian Institute of Science, Under Dr. Chirag Jain in ATGC lab using Ruby on Rails framework.
- Created a relational database from scratch for the website and hosted it with all the features that was required.

Bangalore, India

May 2021 – June 2021

## Projects

### Computational Drug Discovery with CNN using QSAR modelling

FULL STACK DEVELOPER: PYTHON

- Using ChEMBL database developed web app that predicts bio-activity (pIC50) of the target molecule by CNN using QSAR modelling of protein Acetylcholinesterase
- Canonical smiles notations was used to calculate Lipinski descriptors, used in the interpretation of drug likeness of the compounds based on their pharmacokinetic profile that is absorption, distribution, metabolism, and excretion
- [Github link for the project](#)

Bangalore, India

May 2021 - Jul 2021

### CF-CAP (Computational Flu or COVID-19 Anticipator and Precrifer)

DATA SCIENTIST AND FRONT-END DEVELOPER: PYTHON & JAVASCRIPT

- CF-CAP provides first line of aid for the initial symptoms of COVID-19; Using X-ray of lungs to find traces of coronavirus in the lungs using CNN model by designing a web-app with a VGG16 model to predict COVID.
- CF-CAP had an on-paper accuracy of 90% that was trained with over 16,000 image samples with epoch cycles of 50 using VGG16 architecture.
- Serving its purpose, this application got highlighted in the all India page of a top tier national newspaper, "Patrika." [Link to the article](#)
- [Github link for the project](#)

Raipur/Bangalore, India

Oct 2020 – April 2021

## Skills

<b>Programming</b>	Python, JavaScript, Node.js, React.js, MERN Stack, C, Git, MATLAB, (S)CSS, Flask, HTML5
<b>Bioinformatics Tools</b>	Python, R, Bash, Biopython, Linux, BLAST+, MEGA-X, Pandas, Numpy, Matplotlib
<b>ML/AI</b>	Keras, Tensorflow, Full-stack Model-Development, Scikit-learn, Pandas
<b>Databases</b>	MySQL, PostgreSQL, Microsoft SQL Server, MongoDB, Firebase
<b>Wet Lab Skills</b>	Biosafety cabinet (Level 2), Gel electrophoresis, PCR, MTT assay, Immunological Assays Plant callus culture, Animal tissue culture, Microbiology plating techniques
<b>Interpersonal Skill</b>	Leadership with Critical thinking, Public speaking and Presentation, Problem solving skills, Event management

## Seminar and Workshops

**Application of computational tools in drug discovery** At MSRUAS in 2019