

RIYA ELIZABETH JOHN

Software Development | Machine Learning

@ riya_e@es.iitr.ac.in in [riya-elizabeth-john](https://www.linkedin.com/in/riya-elizabeth-john)  [Riyabelle25](https://github.com/Riyabelle25)



ABOUT ME:

- I'm really good at holding a clear vision of what I want and trust that it's coming.
- I enjoy working with people, with words and code.
- I'm a fast learner-I believe that hard work trumps talent, and am fearlessly willing to learn and grow.

ACHIEVEMENTS

IIT Roorkee Heritage Fund Excellence Award

- [The Excellence Awards](#) recognizes students for outstanding academic, co-curricular and extra-curricular achievements and awards scholarships for the same.

EDUCATION

B.Tech in Polymer Science Engineering

Indian Institute of Technology, Roorkee


 July 2019 – Present  Roorkee, India

Senior and Senior Secondary Education

Loreto Convent School


 July 2007 - March 2019  Delhi Cantt, New Delhi

EXPERIENCE

Developer: Project Alexandria, an MS Teams App Clone 

Microsoft, Engage Mentorship Programme

 June 2021- July 2021

Code Contributor: Implemented the Croston's method, a new Forecaster algorithm 

sktime, an open source project under Alan-Turing Institute, London

 June 2021- July 2021

App developer: Collection of networking parameters

Systems and Networking Labs, UCSB (University of California, Santa Barbara)

 August 2020- December 2020

PROJECTS

Sktime [Open Source Contribution]

- [Sktime](#) is a unified (open source) framework for machine learning with time series.
- Sktime does not yet have a forecaster to deal with [intermittent demand time series](#)
- I implemented [Croston's Method](#) (in Python) i.e a new Forecasting algorithm, for the sktime interface to solve the above issue.

Project Salamander- A Gift Recommendation System

- Our work analyses a friend's Instagram profile, and then recommends gifts for that particular friend, to the user.
- This project was a successful submission for the InOut 7.0 Hackathon.

IITR chatbot with RASA

- This Chat Bot was proposed to improve the UX experience of the IIT Roorkee website.
- RASA framework been used for the machine learning modelling part as well as implement the shell version for our chatbot.
- The ChatBot answers humanely, and provides an appropriate answer along with a custom link for specific questions.

WeCare- a Utility App for the Elderly


- Wecare is a showcase app I built during the annual Season of Code held by MDG, under the guidance of my mentors.
- This idea was conceived to make lives easier for the elderly- especially those who live independently without support, as it helps them plan their daily lives and keep track of medicines.
- Available on [Play Store](#)
- An [article](#) I wrote about my experience.

CampusBuddy App [For the students of IIT Roorkee]

- Android application to keep students abreast of all campus related events and information.
- We have used Flutter framework and Dart language for Frontend and Firestore storing data.
- Other Firebase services like Auth, Push Notifications have also been utilized.


Data Science engineer: Stock Market Prediction using Numerical and Textual Analysis

The Sparks Foundation

 Jan 2021- Feb 2021

DL/ML engineer: Building a Recommendation Engine for Social Media

Creato, an alum start-up in it's pre-launch stage

 October 2020-February 2020

SKILLS

Python, C++, Sci-kit Learn, Tensorflow, Keras, Neural Networks, Machine Learning libraries and Deep Learning frameworks

MERN Stack Development, Django, Java, Dart, Android Development, Flutter Development

TOOLS AND TECHNOLOGIES

Git, Firebase Services (Auth, Realtime database, Firestore, Cloud functions), Anaconda distribution (Jupyter notebooks, CLI)

EXTRA CURRICULARS

Core Member

Vision and Language Group

 December 2020 - present

We spearhead the campus' Deep Learning Research culture by holding paper discussions and also publish our work regularly.

Developer

Mobile Development Group, IIT Roorkee

 January 2020-present

We build innovative solutions that ease the lives of students on campus and also foster the Open Source Culture in our institute.

Executive Editor

Watch Out! (Official Student Media Body at IIT Roorkee)

 February 2020 - present

We cover all happenings at IIT Roorkee along with the issues that surround the administration, placements, academics etc.

Emotion-Detection-Classifier

- The objective of this study is to classify mood of the person from facial expressions.
 - Images are categorized in three classes namely sadness, fear and happiness based on the emotion shown in the facial expressions.
 - Implemented Deep Convolutional Neural Network (DCNN)
-

Blinded-Can you dodge the unseen blows?

- An android game written in Kotlin.
 - Player can hear obstacles/hits coming in from either their left or right, via headset.
 - Tensorflow's Posenet Estimation (tfLite) model has been used to estimate if player has successfully avoided these obstacles.
-

COURSES

FROM CURRICULUM:

- Computer Programming: C++ basics, object oriented programming, pointers, arrays and data structures
 - Mathematics-I: Matrix Algebra, Differential Calculus, Multiple Integrals, Vector Calculus
 - Mathematical Methods: Z-transform, Fourier Cosine and Sine Integrals, Fourier Transforms, Convolution Theorem etc.
-

CERTIFIED: [links lead to certification]

- [Algorithmic ToolBox, Coursera](#)
- [Neural Networks and Deep Learning, Coursera](#)
- [Intro to Machine Learning, Kaggle](#)
- [Programming for Everybody \(Getting Started with Python\), Coursera](#)
- [Python Data Structures, Coursera](#)
- [Using Python to Access Web Data, Coursera](#)
- [Introduction to Data Science in Python, Coursera](#)