

Chiranthana R R

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EDUCATION

- Concordia University** Montreal, Canada
• *Master of Computer Science - Thesis based; Supervisor: Dr. Yang Wang*
Sep 2023 - May 2025
Research Area: Deep learning, AI for precision medicine.
- SRM Institute of Science and Technology** Chennai, India
• *Bachelor of Technology - Computer Science and Engineering; CGPA: 9.43/10*
July 2019 - May 2023
Courses: Operating Systems, Data Structures, Artificial Intelligence, Formal Language Automata, Networking, Databases
- Sri Bhagawan Mahaveer Jain College** Bengaluru, India
• *Pre-University Course - Karnataka Board;*
July 2017 - May 2019
Courses: Physics, Chemistry, Mathematics, Biology

SKILLS SUMMARY

- **Languages:** Python, C++, C, SQL, HTML
- **Frameworks:** Scikit, NLTK, NumPy, TensorFlow, Keras, Pandas, Flask, Matplotlib, Seaborn
- **Tools:** GIT, MySQL, SQLite
- **Soft Skills:** Leadership, Event Management, Public Speaking, Problem solving

RESEARCH INTERNSHIP

- Mitacs Globalink Research Internship** Brock university, Canada
• *Research Intern*
Guide :Syed Ejaz Ahmed
Project : Variable Selection for Predictive Modelling
July 2022 - Sep 2022
 - **About the program:** Mitacs Globalink Research Internship is a competitive program that pairs top-ranked international students with specific research expertise with faculty at Canadian academic institutions for a twelve (12) week research project of mutual interest.
 - **Variable Selection:** The project is based on estimation of model parameters and prediction based on high dimensional data (HDD):
 1. Most of the features may not have any influence (sparse signals) on the response of interest
 2. Some of the features may have strong influence (strong signals) on the response of interest
 3. Some of the features may have weak-moderate influence (weak-moderate signals) on the response of interest.
 - **Lasso and Adaptive Lasso for Machine Learning model predictions:**
 1. 'Least Absolute Shrinkage and Selection Operator' (LASSO) : Regularization is implemented by adding a "penalty" term to the best fit derived from the trained data, to achieve a lesser variance.
 2. Adaptive Lasso : as a regularization method, avoids overfitting penalizing large coefficients.
 3. Feature selected data and raw data is fed into ML models to compare the accuracy.

EXPERIENCE

- EZERX Health Tech PVT LTD** Remote
• *Data Analyst intern*
July 2021 - Sep 2021
 - **EzeCheck Device:** A non-invasive portable device which can indicate Blood Glucose, Anaemia, and predict Kidney, Liver and Lung Problems instantly without a single drop of blood from the human body through ML models.
 - **Database Management:** Maintaining state wise database to reach the target audience mainly hospitals, NGO's and health ministers.
 - **Data Analysis:** Analysing and research on existing problems to obtain accurate data sets for EzeCheck.
- Technocolabs Softwares** Remote
• *Data Science and Machine Learning intern*
Jan 2021 - Apr 2021
 - **Mini Project - Spotify Skip Prediction:** Individually contributed to the project aiming to predict skips by users on the Spotify platform with deployment
 - **Final Project - Movie Rating Prediction:** Contributed to the company as a team where we worked on predicting movie ratings by feature selection and NLP techniques.

PUBLICATIONS

- **Research paper: Analysis of Chennai's Water Crisis:**

Work in Progress, abstract selected and paper submitted to Science Diplomacy Review (SDR).

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2 Department of Data Science and Business Systems, School of Computing, SRM Institute of Science and Technology, Chennai, India.

3 Center for AgroTechnologies, Skolkovo Institute of Science and Technology, Moscow, Russia

ORGANISATIONS

- **DATA SCIENCE TEAM, CODECHEF SRM STUDENT CHAPTER:**

SRMIST, India Feb 2021 - Feb 2023

A technical club of SRMIST under the alliance of CodeChef. As a part of the technical team under the data science domain, our main goal is to spread advanced programming. I contribute to technical events and also work on collaborative projects to develop fast-growing software.

- **MACHINE LEARNING, AAKASH RESEARCH LABS:**

SRMIST, India Feb 2021 - Feb 2023

As a Machine Learning Developer at Aakash Research Labs, a technical club dedicated to research which is an initiative of IIT Bombay, I contribute to AI/ML part of team projects. I also ideate new research topics to enhance technology.

HONORS AND AWARDS

- **GLOBALINK RESERACH INTERNSHIP, Mitacs, 2022**

A funded research internship in Canada. I was selected to work under Prof. Syed Ejaz Ahmed for "Statistical and Machine Learning" project at Brock University.

- **TOP 10 TEAMS, HACKTRIX IEEE, APR 21**

Top 10 mention at a hackathon organised by IEEE Organisation, SRM University, April 2021 for the project - Aqua Analyst, a platform to provide insights on drinking water samples in different geographical locations.

- **WINNER, LAKE - NATIONAL ECOLOGICAL SYMPOSIUM, IISc, 2014**

National Ecological Symposium winner conducted by IISc, Bangalore. Awarded as "Young Sahyadri Ecologist" for research on "Investigation of Ground Water Quality Deterioration in Urban Areas".

PROJECTS

- **RESOURCENITIC(Machine Learning, Geography, Exploratory Data Analysis):**

a. Resourcenitic aims at providing service-oriented industrialists and cooperates sector a platform to understand the global natural resources share and future feasibility of projects or power plants they tend to establish.

b. Three ML models to predict a) Land feasibility, b) Region feasibility, c) Capacity of the power plant by energy rates.

- **COVIAS(TMachine Learning, Tableau, Web Development, Web scraping):**

a. COVIAS(T is a platform to assist the public with their blood sample report in hand and predict the virus attack along with informative home remedial measures to combat the deadly virus.

b. Assistance for users to understand CT scans, where initial CT-Patterns in covid-19 like ground-glass opacifications, Multilobar involvement, Peripheral Distribution are shown.

- **DR. CRYPTO(Cryptocurrency, Market Research, Machine Learning, Tableau, Web Development, Data Science):**

a. The model predicts the market cap of the particular coin you are interested in.

b. This feature lets the investors study the market cap of different coins and compare them to choose the best and feasible one.

- **Chennai Water Crisis, Finding threats and potential solutions(Artificial intelligence (Neural Nets), Machine Learning, Data science, Analysis and Visulaisation):**

a. Studying reservoir level and rainfall levels to study the crisis and hence hidden relationships and insights were drawn.

b. Data Visuals of year wise rainfall data, urbanisation and population.

c. Time series forecasting using LSTM to forecast rainfall and reservoir levels.

- **Variable Selection for predictive Modelling(Feature Selection, Statistics, Penalty Regualrisation, Machine Learning):**

a. Shrinking data for high dimensional datasets to eliminate irrelevant features.

b. Lasso and Adaptive Lasso regularization techniques were performed to select features.

c. The shrunk dataset and raw data is both then fit into linear regression ML models and the accuracy is compared and tested.