### **Programming Background & Projects**

Name: Rohit Girdhar

Undergraduate Major: Information Technology

Undergraduate Minor: Big Data

**Python** (Preferred language) Proficiency: Excellent, Exp: 7.5 years

First introduced during 11th standard, I've used Python for competitive coding during campus placements, freelancing work as a web developer, and

for automation, data science, and machine learning projects during my role as a Business Analyst at Dell Technologies.

Java / C++

Proficiency: Good, Exp: 4 years

Familiar with most OOP concepts. Used Java for Android application development and C++ for software development and network programming.

Web Technologies (HTML, CSS, JS, React, etc.)

Proficiency: Excellent, Exp: 6 years

Started by making a blog for school's computer fest in 2014 *Link*, later went on to become the technical head of Web and Graphics for our

computer science club at college. Recently developed a Flask application for a client at work, and hosted it on IIS.

**SQL** (T-SQL, SSIS)

Proficiency: Very Good, Exp: 5 years

As a Business Analyst, I use SQL almost every day. This involves creating views, updating tables, taking backups, developing SSIS packages, etc.

Power BI / Tableau (Connecting to various data sources, DAX)

Proficiency: Good, Exp: 3 years

Got introduced to Tableau during my internship at Ernst & Young as a Data Analyst, where the problem statement was to identify ration card frauds happening at state at district levels in various regions of India. Learnt dashboarding and the art of effective story telling at Dell Technologies.

### UNDERGRADUATE COURSEWORK

Language & Concepts	Course	Sem	Grade
Java (Inheritance, Polymorphism, Interfaces, Abstract classes, Collections)	Object Oriented Programming Lab	3	Α
C++ (Stacks, Queues, Linked Lists, Tress, Class, Constructors, Pointers, Sorting)	Data Structures Lab	3	В
<b>SQL</b> (DDL, DML, Joins, Nested queries, Cursors, Stored Procedures, MongoDB)	Database Systems Lab	4	Α
HTML, CSS, JS, jQuery, Python, JSON, Node JS, Angular JS (Web development)	Internet Tools & Technologies Lab	5	А
C++ (Shell scripting, system calls, CPU scheduling algorithms)	Operating Systems and Algorithms Lab	5	А
Java, React Native (Android app development, backend database design)	Advanced Technology Lab	6	Α
Python (Spark SQL, Redis, Impala)	Big Data Modelling and Management	6	А
Python (PySpark), Databases (MongoDB, Neo4j)	Graph Analytics for Big Data	7	Α
Python (EDA, Modeling techniques, Model evaluation)	Machine Learning with Big Data	7	Α
R (EDA, Data Modeling, Predictive Evaluation)	Data Analytics Lab	7	Α

## **ACADEMIC PROJECTS**

# Information Retrieval System (Python CGI, JavaScript)

Built a web application based on the Boolean Model of information retrieval, with support for AND, OR and NOT operators.

GitHub Link: https://github.com/Rohitgird/Boolean-Retrieval

Paper Vision (Java, Firebase)

Android application for faculty members to scan handwritten student records and store them digitally on the cloud. https://qithub.com/Rohitqird/PaperVision/tree/master/app

Capture-Play (React, React Native, Azure Cognitive Services API, Spotify API)

Web and Android app to play music based on the environmental setting and mood of the user using the webcam/front camera.

TheCarPoolers (HTML, CSS, JavaScript, PHP)

Website aimed to reduce global CO<sub>2</sub> emissions by encouraging and providing a platform for car-pooling services.

GitHub Link: https://github.com/Rohitgird/TheCarPoolers

#### PROFESSIONAL PROJECTS

Quotes Prediction (Python: Pandas, NumPy, Scikit-learn, SQL: T-SQL, SSIS)

Setup a machine learning pipeline to predict the conversion likelihood of open business quotes with a 92.3% accuracy, and fine-tuned existing models using hyperparameter tuning.

## PriceX Dashboard (Power BI + DAX)

Migrated legacy costing tool to a Power BI dashboard to help cycle planners view and manage data seamlessly on a single platform, and plan ahead for the upcoming cost cycle. Scaled it to 12 countries in 3 regions.

## Data Cleaning and Normalization (Python: Pandas, NumPy, Excel)

Revamped the existing manual data cleaning process into an automated one, paving way for the expansion of these programs into new regions and segments.

## Web Crawling Optimization (Python: Selenium, Scrapy, Pandas, SQL, Excel)

Helped build and optimize the web crawling pipeline to provide more accurate and reliable data in 40% less time. Later, automated the crawling and data cleaning processes using batch file scheduling and regular expressions.

#### PERSONAL PROJECTS

### **Personal Website**

Find out more on about what I do outside of work!. Link - https://rohitgirdhar.com/

### **IECSE Club's Website**

Designed and developed for my college's computer science club in 2017, it perfectly portrays the diverse activities we take part in. Link - https://iecsemanipal.com/ and https://github.com/Rohitgird/Club-Website-Me

#### **Dribbble Portfolio**

Dribbble is a social networking platform for digital designers and creatives, based on an invite-only system. I love to doodle and design in my spare time. Check out some of my digital illustrations at the link below.

Link - https://dribbble.com/rohitgird12

#### **MOOC Certificates**

Course	Language	Platform	Certificate Link
SQL for Data Science	SQL	Coursera	<u>Click here</u>
Excel Business Intelligence: Power Query	Excel	LinkedIn	<u>Click here</u>
SQL Server Integration Services	SQL	LinkedIn	<u>Click here</u>
NLP with Python for Machine Learning	Python	LinkedIn	<u>Click here</u>
React Building Progressive Web Apps	React JS	LinkedIn	<u>Click here</u>
Introduction to Data Science in Python	Python	Coursera	<u>Click here</u>
Deep Learning Hands-On Artificial Neural Networks	Python	Udemy	Click here
Machine Learning: Regression	Python	Coursera	<u>Click here</u>
Machine Learning: Classification	Python	Coursera	<u>Click here</u>
Machine Learning: Clustering and Retrieval	Python	Coursera	Click here
Machine Learning: Specialization	Python	Coursera	Click here
Excel VBA and Macros	VBA	LinkedIn	Click here
SAS Statistics and Data Analysis	SAS	Udemy	Click here
Introduction to Data Analysis using Excel	Excel	Coursera	Click here
Master Regular Expression	Python	Udemy	Click here
Web Scraping with Python	Python	Udemy	Click here
Python for Data Science and Machine Learning Bootcamp	Python	Udemy	Click here