

# Rishabh Jain

DATA ANALYST | ML ENGINEER | DATA SCIENTIST | PYTHON DEVELOPER

## Contact Details:

Email: [r.jain2@nuigalway.ie](mailto:r.jain2@nuigalway.ie)

Phone: (+353)-894-876-432

Address: Apt 2, 68 College Road, Galway,  
H91 HP66

LinkedIn:

<https://www.linkedin.com/in/rishabhjain16>

GitHub:

<https://www.github.com/rishabhjain16>

Work Status: No immediate  
visa/immigration support required. Eligible  
for the 1G stamp (third level graduate  
stamp) valid up to 2022.

## Fields of Interest

- Computer Vision and Deep Learning
- Python Development and Machine Learning
- Artificial Intelligence in Medicine and Healthcare

## Technical Skills:

- Languages: SQL, R, Python 2.7/3.6, C, C++, C#, Advanced Java Tools, HTML, CSS, Javascript, NodeJS
- BI: MS Excel, Tableau, Salesforce, Power BI
- Database: MySQL, Oracle, MongoDB
- Analytical techniques: Regression, Classification, Clustering, Forecasting, Neural Networks, PCA, SVM, CNN.
- ML Libraries: Pandas, NumPy, SciPy, Sklearn, Seaborn, Tensorflow, Keras, pyTorch, Matplotlib, ggplot2, tidyr, dplyr, OpenCV, dlib, face\_recognition.
- Cloud and related platform: Azure ML Studio, AWS- Lightsail, S3, EC2, Lambda, Google Cloud Platform - Compute Engine, Big Data, Kubernetes, Cloud SQL, Big Query, Hadoop, Spark and Docker
- Version Control: Git
- Software: R Studio, Anaconda, Pycharm, Spyder, Jupyter Notebook, Visual Studio, Unity, Eclipse.

## Profile

Currently pursuing masters in Data Analytics from NUIG. Looking to earn tenure within the domain of Data Analytics. I have worked on technologies like Big Data tools, SQL, R, Python, AWS, GCP, Microsoft Azure, Oracle, Java and C#. I am effective in dealing with problems and coming up with creative solutions. Experience in working on tools and platform for development in Machine Learning, Deep Learning, Artificial Intelligence, Natural Language Processing and Data Visualization.

## Work Background

### Teaching Assistant and Marker National University of Ireland, Galway

January 2020 - present

- Lab Assistant for the course: Object-Oriented Software Design and Development, Object-Oriented Programming II, and, Computer Network and Data Communications.
- Responsible for teaching lab work to students, solving their queries, and evaluating assignments and exams.
- Teaching languages include Java, JSON, SQL, Linux, Terminal, Script, Shell, and C#.

### Software Engineer Trainee Enbake Consulting, New Delhi

April 2018 - July 2018

- Engineered middleware of an application that geocodes addresses using Python.
- Implementing Data Mining and Data Modelling techniques for pre-processing data using NodeJS, Python API's and GCP
- Developed networking and communication skills by working in a cross-functional team.

### English Language Teacher Resala Charity Association, Cairo, Egypt

December 2016 - January 2017

- Four weeks long internship in Egypt to promote UN sustainable development goals.
- Initiated, facilitated, and moderated classroom discussions and prepared course materials such as syllabus and homework assignments for the students at Resala Charity Association.
- Built strong networking skills by working with interns from all over the world and Developed leadership qualities by teaching and mentoring children at Resala Charity Association.

## Soft Skills

- **Teamwork:** Gained teamwork experience by working in teams for various masters and bachelor's projects and also by working in a team as a software development intern.
- **Communication:** Developed excellent communication skills through teaching, mentoring, and volunteering. And by giving presentations during masters and bachelor's education.
- **Leadership:** Working at NGOs, teaching, and volunteering through Rotaract and AIESEC led me to achieve excellent leadership qualities.
- **Research:** Completing numerous projects in a master's degree and various courses on Coursera has led me to have enhanced critical, computer and research skills.
- **Problem Solving:** Built ability to solve problems by taking an analytical and systematic approach, demonstrated through various technical projects, hackathons, Kaggle competitions, and online courses.
- **Languages:** Full professional proficiency in English, native/bilingual proficiency in Hindi, and conversational proficiency in Spanish.

## Publications

- Rajaseskaran, Rajkumar & Jain, Rishabh & M., Sruthi. (2020). Patient Health Monitoring System and Detection of Atrial Fibrillation, Fall, and Air Pollutants Using IoT Technologies. DOI: 10.4018/978-1-7998-1090-2.ch010.

## Certifications

- AI for Medical Diagnosis by Deeplearning.ai | May 2020
- Introduction to Cyber Security Specialization by NYUI May 2019
- Machine Learning with TensorFlow on GCP Specialization | June 2018
- Deep Learning Specialization by Deeplearning.ai | April 2018
- Technology Training with projects TCS: Core JAVA | June 2017

## Education

### MSc Data Analytics

National University of Ireland, Galway

September 2019 - present | (Expected 1.1 Honours)

- Modules: Machine Learning, Deep Learning, Natural Language Processing, Applied Regression, Data Visualization, Case Studies in Data Analytics, Information Retrieval, Programming in Data Analytics (includes R and Python).
- Ongoing Thesis: Toolkit for Facial landmarks Identification and recognition based on the analysis of video data and creating video snippets of the identified faces.

### B. Tech in Computer Science and Engineering with specialization in Bioinformatics

Vellore Institute of Technology, Tamil Nadu

July 2015 - May 2019 | (CGPA: 8.73 equivalent to 1.1 Honours)

- Modules: Data structures and algorithms, Database Management System, Web Mining, Image Processing, Data Mining with R, Software Design and Development, Object-Oriented Programming with C#, Python, Network and Communication, Internet and Web Programming, Internet of Things, and Content-Based Image and Video Retrieval.

## Projects

### Handwriting Prediction GUI using MNIST Dataset and Deep Learning

- A tool to recognize digits present in the image using a deep learning convolution neural network.
- Technologies used: Python, Tensorflow, Keras, MNIST dataset, CNN.

### Document Scanner App using OpenCV and Python

- Reads in documents for scanning as images and converts them into a readable format in a top-down view.
- Technologies used: Python, OpenCV, skimage, imutils.

### Implementation of Deep Neural Network from Scratch

- Implementation of a deep neural network from scratch for image classification on the CIFAR-10 dataset.
- Using relu activation function and an additional hidden layer for improving the performance and accuracy of the neural network
- Technologies used: Python, Numpy, Sklearn, matplotlib.

## Hobbies

- Photography
- Reading
- Football
- Bike riding
- Volunteering - Macnas Halloween Parade, Galway 2020, Rotaract, AIESEC.

## Referees

- Dr. Michael Schukat, Programme Director - M.Sc. in Artificial Intelligence, School of Computer Science, NUI Galway | michael.schukat@nuigalway.ie
- Dr. Seamus Hill, Lecturer and Researcher, Department of Information Technology, NUI Galway | seamus.hill@nuigalway.ie
- Prof. Umair ul Hassan, Research Fellow & Adjunct Lecturer, Insight Centre of Data Analytics, NUI Galway | umair.ulhassan@nuigalway.ie

## Sentiment Analysis of IMDB movie reviews using Deep Learning in Python

- Identification/Recognition of sentiments (Positive/Negative/Neutral) in natural language using Recurrent Neural Network with Long short term memory.
- Technologies used: Python, Tensorflow, Keras, RNN, Numpy, Pandas, LSTM.

## ML Kaggle Competetion: Titanic Prediction

- Using the Titanic dataset for making machine learning predictions.
- Models used include Random Forest Classifier, XGB Classifier, Gradient Boosting Classifier and Support vector classifier.
- Performed Data visualization and feature engineering.
- Achieved a maximum accuracy of 79.425%
- Technologies used: Python, Numpy, Pandas, Seaborn, XGBClassifier, GradientBoostingClassifier, RandomForestClassifier, SVC.

## Data Visualization in R

- Using R for data visualization for various projects and assignments during graduation.
- Technologies used: ggplot, dplyr, tidyr, RColorBrewer, plotly, latti