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## SUMMARY

- Completed Master's in Data Analytics (1.1), Master's in Physics (2.1) and Bachelor's in Physics (1.1)
- Currently working as part-time Associate Faculty at National College of Ireland.
- Excellent communication & inter-personal skills developed while working in customer oriented environment in Ireland (**SPAR, Dublin**).
- Excellent reputation for problem-solving, improving customer satisfaction, team player & leadership skills.
- Growth mindset along with skills in Python, R, C++, SQL, Postgres, Power BI, Tableau, Git, Microsoft Dynamic 365, Excel, Word, PowerPoint, IBM-SPSS, Jupyter, Google Colab.
- Fostering a culture of data visualisation with tools like Tableau and Power BI for translating data into informative reports and dashboards that provides business information and helps in delivering solutions.
- Experienced in analysing financial data, building financial models, process enhancement, optimisation, reporting systems and key performance indicators (KPIs).
- **Languages:** English (Fluent), Punjabi (Native), Hindi (Native).
- **Eligible to work full time.**

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## EXPERIENCE

### Associate Faculty

Jan 2021 – Present

National College of Ireland

Dublin, Part-time

- Presented lectures & delivered course material to students.
- Assisted professors in taking online classes.
- Assisted students during and after the lectures.
- Reviewing methods and teaching materials and making recommendations for improvement.
- Contributing to the creation of an environment that promotes growth, equality, and freedom of speech.
- Modules lectured for: Data Visualisation, SQL & Databases, Python, R.
- Assisted in the modules: Database & Analytics programming, Statistics for Data Analytics, SQL & Databases, Business Intelligence & Business Analytics, Modelling Simulation & Optimisation, Python & R.

### Sales Assistant

Nov 2020 – Jan 2021

SPAR Ireland

Dublin, Part-time

- Processed sales, exchanges, and refunds on a daily basis.
- Followed company guidelines on retail and security procedures.
- Ensured an exceedingly high level of customer service.
- Ensured that the visual standards of the store met the company's high standards.
- Helped customers make purchasing decisions by offering suggestions.
- Handled customer queries patiently and efficiently while dealing with complaints.
- Cleaned & maintained assigned area.

### Laboratory Assistant

Sep 2020 – Nov 2020

National College of Ireland

Dublin, Part-time

- Assisted professors in taking online classes.
- Assisted students in clearing queries & doubts during and after the lectures.
- Accurately evaluated students' progress during the lab session.
- Diagnosed issues during the lab sessions and fixed them by guiding students during one-to-one sessions.
- Assisted in modules: Database & Analytics Programming, Business Data Analysis, Data Communication & Networking, Wireless Networking.

### Data Analytics Consulting Virtual Internship

May 2020 – Oct 2020

KPMG

Dublin, Internship

- Checked the quality of the data received from the client using Microsoft Excel and drafted an e-mail to communicate with the client about data quality.
- Prepared approach for data analysis using Python in three fundamental stages: Data Exploration, Model Development, and Interpretation.
- Developed a dashboard using Tableau to present the findings.

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## EDUCATION

### National College of Ireland

*M.Sc. in Data Analytics*

Dublin, Ireland

Jan 2020 – Feb 2021

**Grades:** 77.1%, 1.1 grade, First Class Honours.

**Modules:** Data Mining and Machine Learning-I (DMML-1), Database and Analytics Programming, Business Intelligence and Business Analytics, Statistics for Data Analytics, Data Mining and Machine Learning-II (DMML-2), Modelling Simulation and Optimization, Domain Application of Predictive Analytics, Research in Computing, and Data Governance and Ethics.

#### Academic Projects:

- Managing and Visualising the Workings of an Organisation using Microsoft Dynamics 365 and Power BI Dashboards.
- Rainfall Prediction in Australia, Exoplanet Classification, & Indian Air Quality Index Prediction for DMML-1.
- Statistical Analysis using Binary-Logistic Regression, one-way ANOVA, t-Test and chi-Square Test.
- Visualising the COVID-19 Pandemic using Reddit posts, Twitter Hashtags and Stock Market fluctuations.
- Life Expectancy Prediction using Multiple Linear Regression and Consumer Price Index Forecasting Model.
- Simulation and Optimisation for high speed train scheduling from London to Birmingham.
- Comparing Transfer Learning Techniques for Detection of Traffic Signs using Image Recognition for DMML-2.
- Deep Learning Approach to Detect and Recognise Masked Faces using Partial-Facial Attributes.

### University of Zurich

*M.Sc. in Physics - Theoretical Astrophysics & Cosmology*

Zurich, Switzerland

Sep 2017 – Oct 2019

**Grades:** 4.5/6, 2.1 grade.

**Modules:** Theoretical Astrophysics, Theoretical Cosmology, Astro-Particle Physics-I & II, Introduction to Astrobiology, Extra-Solar Planets, The Sun & the Planets, Planet Formation.

### University of Delhi

*B.Sc. (Honours) in Physics*

New Delhi, India

Jul 2014 – Jul 2017

**Grades:** 77.64%, 1.1 grade, First Class Honours.

**Relevant Modules:** Mathematics (Analysis & Statistics), Mathematical Physics (Linear Algebra, Calculus, Linear Programming), Numerical Analysis (C++), Microprocessor Programming, Digital Electronics.

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## TECHNICAL SKILLS

- **Python:** Python was extensively used as the programming language of choice for Master's Thesis and several projects during both Master's degrees.
- **Frameworks & Libraries:** Jupyter/Google Colab, Numpy, Pandas, Matplotlib, Seaborn, Scikit-learn, Tensorflow, Keras & PyTorch were used for various academic projects.
- **R:** R programming language was used for Data Mining, Machine Learning and Statistics projects.
- **SQL:** Gained knowledge of SQL, and developed databases by writing queries. Still improving database design skills via online courses.
- **C++:** C++ was used extensively in projects during Bachelor's degree.
- **Tableau/Power BI:** Data Visualisation tools were used to design dashboards during academic projects. Tableau was also part of the *Data Visualisation* module delivered as an *Associate Faculty* at National College of Ireland.

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## INTERESTS & ACHIEVEMENTS

- **Personal Projects:** Developing own website to showcase HTML/CSS skills. Regularly write articles on personal blog and Medium. Avid photographer, editor, blogger and programmer. Developing a few deep learning projects on the side to hone Python skills.
- **Music:** Proudly possess Diploma in Harmonium (Vocal) from Prayag Sangeet Samiti, Allahabad, India. Passionately listen & sing devotional Bhajans/Kirtan.
- **Volunteer:** Regularly volunteer at the local Gurudwara (Sikh Temple) in Dublin to help provide free food & clothes for the needy, especially during crisis.
- **Community:** Organising private Physics & Mathematics classes for high school students struggling to cope with the new challenges this year.
- **Awards:** Grade 12 (A-Level) - School Topper (2014). KVS National Level INSPIRE Award by Department of Science & Technology, Government of India and KVS (2012).