ARUN KUMAR R A

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Academic Qualifications

Year	Degree	Institute	CGPA/%
2019- Present	M.Tech. Industrial & Management Engineering	Indian Institute of Technology, Kanpur	7.51*
2017	B.E. Production Engineering	Government College of Technology, Coimbatore	8.35
2013	Class XII	Arunachalam HSS, Thiruvattar, Tamil Nadu	94.25
2011	Class X	Arunachalam HSS, Thiruvattar, Tamil Nadu	93.2

upto 2nd semester

Work Experience

Assistant System Engineer – Tata Consultancy Services, Kochi   *21 months (Sept 2017 –June 2019)*
- Worked as an **Administrative contractor** for vendor application services stream - Client **Ernst & Young** (APAC region).
- Served as liaison between business and technology on a critical **On-Premise to Azure cloud** disaster recovery solutions project.
- Decreased the production server downtime by **30+%** by identifying roadblocks to implementation and developing solutions.
- Reduced ticket resolution time by **20%** by creating and maintaining knowledge base articles.
- Presented weekly service reports to the senior leadership and clients, knowledge sharing sessions to the team.
- Tools and Techniques used: **Agile Methodology, Service Now, Excel, PowerPoint,** and **SQL (DML)**.

Summer Internship

Market Research Analyst Intern – Magic9 Media Analytics Private Limited, Mumbai   *3 Months (April 2020 - July 2020)*
Problem Statement: Impact of cheap data availability in the internet usage of people of different strata
- Understanding the population data of Telecom users in India, secondary data collection &analysis, and **hypothesis formulation**.
- Designed a structured questionnaire and administered it to the target group for **quantitative research**.
- Performed **Exploratory Data Analysis** to understand the difference in the internet consumption behavior of people.
- Used different Statistical Techniques to test multiple hypotheses at a 5% significance level.
- Created multiple **Data Visualisations** to elucidate the findings of the analyses performed.
- Tools and Techniques used: **Hypothesis testing, ANOVA, Online Survey, Google Sheets, Tableau, and Python.**

Coursework and Skills

Relevant Courses	**Statistical Modeling for Business Analytics** | **Applied Machine Learning** | Introduction to **computing** Operations research for Management | **Probability & Statistics** | **Data Mining** and Knowledge Discovery
Technical Skills	**Python** (Numpy, Pandas, Matplotlib, Scikit-learn, Statmodels, Keras) | R | JAVA | **SQL (DML)** | HTML | Tableau

Academic Projects

Data Mining and Knowledge Discovery	**Quora Question Pair Similarity – NLP Text Mining** *(Oct 2019 - Nov 2019)* o To Identify questions asked on Quora that are duplicates of the questions that have already been asked. o Preprocessed the text data by cleaning, stemming, removing stopwords, and punctuations. o **Engineered** string matching and term frequency-inverse document frequency-based **features**. o Applied 3 classification algorithms with **Precision and Log loss** as the performance comparison metric. o **XGBoost** model performed much better than the linear models.
Applied Machine Learning	**Air Quality Index Prediction for Bangalore** *(Mar 2020 - May 2020)* o Extracted climate and AQI data from two different websites. o Data retrieved in HTML format is then **web scrapped** using beautiful soup library in python. o Performed data cleaning, Applied **Linear Regression, Random forest regression, and ANN** algorithms. o Achieved a **12+ %** improvement in model performance by **Hyperparameter tuning**. o Created a User Interface and deployed the model using the **Flask framework, Github, and Heroku cloud**.
Statistical Modeling for Business Analytics	**Medical Insurance Premium Prediction** *(Jan 2020 - Feb 2020)* o Conducted **Multiple Regression analysis** to study factors influencing the medical insurance premiums. o Verified OLS assumptions, Identified and removed multicollinearity in the model. o Statistically significant variables were selected by the **forward stepwise feature selection** technique. o The analysis revealed that the interaction between smoker and BMI results in higher insurance premiums.

Virtual Internships and Online Certifications

KPMG Virtual Internship	Participated in the open-access KPMG data analytics Virtual Internship Program by Insidesherpa. o **Developed an interactive dashboard** focusing on **identifying potential customers** o Compared the work with real model solutions created by the KPMG team.
SQL for Data Science	Learned to apply the powerful language of SQL to communicate and extract data from databases.
Neural Networks & Deep-learning	Learned the foundations of deep learning and the key parameters in a neural network architecture.

Positions of Responsibilities

Internship Coordinator, IME IITK	Organized the summer internship process for a batch of **18 students**.	*(Sept '19 - Mar '20)*
Teaching Assistant, IME IITK	Assisting professors in their academic works - course B2B Marketing	*(Aug '19 – Present)*
Point of Contact, IMAD, TCS	Organized townhall meeting comprising **5+ events** with partaking of 100+ people	*(2018-19)*
Student Coordinator, SAE - GCT	**Managed a core team of 10+ students** in organizing Events and Automobile workshops.	*(2015 – 16)*
Treasurer, Green Club – GCT	Administered the annual budget of **INR 3 lakhs+** divided across 6 events and 1 workshop.	*(2016 –17)*

Awards and Achievements

- Awarded "**On the SPOT Award**" for upholding organizational values and professional excellence in 2018 and 2019.
- **Secured First Class with Distinction** in B.Tech for excellence in academics.
- Secured an **All India Rank 27** in Graduate Aptitude Test in Engineering – PI stream in 2019.
- Awarded a Merit scholarship amount of **INR 1,20,000** for academic excellence by Foundation For Excellence trust, Bangalore
- Awarded "**Best Editor Award**" for TCS Internal Short film contest in 2019.
- Secured **Runner up** position in the Anna University Zonal level **cricket tournament**.