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## EDUCATION

**NIIT University**

*B.Tech, Computer Science and Engineering*

Aug 2018 – present

**8.02 (till semester- 6)**

## SKILLS

**Mathematics and Statistics:** Descriptive Statistics, Probability, Binomial Distribution, Bayes Rule, Sampling distributions, Central Limit Theorem, Confidence Interval, Hypothesis Testing, A/B Test, Regression

**Programming:** Python (pandas, NumPy), SQL, R, Java

**Visualization:** Tableau, Excel Chart, Matplotlib, seaborn

**Database:** MySQL, PostgreSQL, Microsoft SQL Server

**Effective Communication, Project management, Problem-solving, Research, Teamwork**

## PROJECTS

**Medical Appointment No-Show**, Data Wrangling, EDA, Data Visualization

**May 2021 – June 2021**

- **Problem Statement** - Many patients book the appointment with the doctor and then failed to attend scheduled appointments. The average No-Show is **20%** leading to **lower clinical efficiency** and loss of **20 million** every year to the Brazilian economy.
- **Objective** - To investigate the reason why some patients do not show up to their scheduled appointments.
- Data was gathered from **kaggle's Medical Appointment No Show** dataset and loaded in **google colaboratory** for analysis.
- Dataset has more than **100K** records/rows.
- In **data-wrangling** major time was devoted to **assessing and cleaning data**. Data was **dirty** and **messy** with issues in its content.
- Cleaning **invalid data** like float datatype for PatientID and AppointmentID, negative values in age column which is impossible.
- Removing **irrelevant data** like Appointment Time which was **00:00:00 (HH:MM:SS)** in all the rows, some records have appointment day before the scheduled day.
- Transforming **messy data** like ScheduledDay and AppointmentDay having **multiple variables** in date-time format (dd-mmm-yyyy HH:MM:SS) in a single column. They were separated into different columns such that there is **one variable per column**.
- Renaming column name in **snake case** to access the column using period with data frame like `df.column_name`
- Summarizing features and finding **descriptive statistics** like a **five-number summary** for the age column.
- Handling outliers in age column using **68–95–99.7 rule**.
- Undertaken **exploratory data analysis (EDA)** to find the important feature responsible for the no-show.
- To support our analysis used libraries like **matplotlib** and **seaborn** to make **clean, uncluttered design** with **easy-to-interpret** data visualization.
- Both **categorical** and **quantitative** variables were used for visualization.
- **Important features** to predict no-shows are age, hypertension, diabetes, neighborhood, and scholarship.