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'DHn' DataHaven

DATA ANALYTICS BOOTCAMP

INSTRUCTOR

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COURSE LENGTH

12 WEEKS*

COURSE FEE

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SYLLABUS

PRACTICAL DATA ANALYTICS – BEGINNER TO PRO BOOTCAMP

Weeks 1

UNDERSTANDING DATA ANALYTICS

- Who is a Data analyst?
- Skills required of a Data analyst.
- Responsibilities of a Data analyst.
- Difference between Data analytics, Data analysis☺, and Data science.
- Types of Data analytics
- Learn the data analysis processes.
- Data analytics tools.
- Understand Github, Jovian and other relevant platforms.
- Learn how to find answers/information.
- Exploring web portfolio.

STATISTICS

- Meaning and scope of statistics.
- Types of statistics.
- Statistical data.
- Types of data.
- Classes and sources of data.
- Graphical presentation of data.

Measures of central tendency and partition:

- Arithmetic mean.
- Median.
- Mode.
- Quartiles.
- Box & Whiskers plot (Box plot).

Measures of dispersion:

- The Variance
- Standard deviation.
- Range.
- The mean deviation

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Correlation and Regression:

- Correlation analysis.
- Scatter Diagram.
- Regression Analysis.

Weeks 2,3,4

EXCEL FOR DATA ANALYTICS

Basic Excel Skills:

- Introduction to Excel interface and navigation.
- Data entry, formatting, and cell referencing.
- Basic formulae and functions *(SUM, AVERAGE, COUNT, IF, etc.).*
- Sorting, filtering, tables and Named ranges.

Intermediate Excel Skills:

- Advanced functions *(VLOOKUP, INDEX-MATCH, etc.).*
- *Conditional statements.*
- Data cleaning techniques *(removing duplicates, handling errors).*
- *Data transformation.*
- Statistical analysis *(correlation, regression).*
- *Data Visualization + slicers.*

Advanced Excel Skills:

- Pivot tables.
- Dashboard architecture.
- Interactive dashboard.
- Macros and VBA (Visual Basic for Applications) for automation.*

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Presentation and Reporting:

- Tools used.
- Best practices (colour, fonts etc).
- Sample.

Weeks 5,6

SQL FOR DATA ANALYTICS

Introduction to SQL, Databases & DBMS:

- Understanding Databases and DBMS.
- SQL structure.
- Designing a Data Model.
- Creating a database.
- Basic SQL query, and SQL commands.
- Data types.
- Understanding DDL.
- Understanding DML.
- Understanding DQL.
- Understanding TCC.

Intermediate SQL:

- Data analysis with SQL.
- Aggregation functions (COUNT, SUM, AVG, MAX, MIN).
- Joins and subqueries for complex data retrieval.
- Modifying data (CRUD) - (INSERT, UPDATE, DELETE).

*Advanced SQL:

- Views, stored procedures, and triggers.

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Week 7,8

POWER BI FOR DATA ANALYTICS

Power BI Fundamentals:

- Introduction to Power BI and its interface.
- Data importing, transformation, and modeling.
- Creating relationships between data tables.

Data Visualization and Analysis:

- Building interactive reports and dashboards.
- DAX (Data Analysis Expressions) for calculated columns and measures.
- Utilizing slicers, filters, and drill-downs for dynamic visuals.

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Weeks 9

AL & LLM FOR DATA ANALYTICS

ChatGPT Prompting:

- Generating synthetic datasets with ChatGPT.
- ChatGPT functionalities: summarization, calculations, insights generation.

Data Manipulation, Analysis with ChatGPT:

- Using ChatGPT for descriptive and inferential analysis.
- Asking ChatGPT to summarize datasets.
- Analyze a dataset using ChatGPT.

Reporting with ChatGPT:

- Generate insights and create a PowerPoint presentation.

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- Providing guidance for color schemes and layouts.
- Include text, visuals, and storytelling elements crafted with ChatGPT.
- Aligning data insights with audience expectations.
- Creating executive summaries and action plans.
- Asking ChatGPT for metaphors or analogies to simplify data.
- Asking ChatGPT for storytelling techniques in visualizations.

Weeks 10,11,12

PYTHON FOR DATA ANALYTICS

Python Basics:

- Introduction to Python programming.
- Data types, loops, conditional statements.
- Functions, modules, and libraries.

Data Manipulation and Analysis:

- Data structures (lists, dictionaries, tuples).
- Pandas' library for data manipulation.
- Data visualization using Matplotlib and Seaborn.

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COURSE: CAPSTONE PROJECT

FAQ

PRACTICAL DATA ANALYTICS – BEGINNER TO PRO BOOTCAMP

What's the difference between your online bootcamp and in-person bootcamp?

This online bootcamp has almost the same curriculum as our in-person bootcamp. Our in-person bootcamp for now, no longer runs, and when started again will be wait-list based. This online course, however, can be taken at any time, on your schedule.

How long does it take to complete the bootcamp?

We teach the course in person over 12 weeks. But we have seen students online who are capable of completing the course as quickly as 2 weeks. It depends, if you are going to work full-time or part-time. It can also be helpful to read around the topics and do more self-directed research and experimentation.

I don't have any prior experience or a technical background, can I join?

The course is designed for all students of all levels. The most inexperienced student didn't know what data analytics was. The most important thing is perseverance and willingness to learn. If you have that, THEN YOU'LL DO GREAT!

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Other **INFO.**

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VIRTUAL PLATFORM(s):

- Google meet.
- Whatsapp.
- Github.

SCHEDULE:

- Monday: 10am
- Wednesday: 10pm
- Friday: 10am

LINKS:

- GitHub: *https://github.com/mrarmsty/Data_analytics_training_B*

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