

Internship activity overview

Date(s)	Short description of activities
20.07.2022 - 21.07.2022	<p>SQL Code Module: Databases and Microsoft SQL + T-SQL AND SSIS</p> <p>Databases and Microsoft SQL:</p> <ul style="list-style-type: none"> • Data Definition Language (DDL) • Data Manipulation Language (DML) • Database Normal Forms • Conditional Statements • Commonly used SQL Functions <p>T-SQL AND SSIS:</p> <ul style="list-style-type: none"> • User defined Functions and Stored Procedures • SQL Server Cursor • Indexes • Data Warehouse Modelling • SQL Server Integration Services (SSIS)
22.07.2022	<p>SQL Server Administration Module</p> <p>Introduction to SQL Server administration:</p> <ul style="list-style-type: none"> • SQL Server Overview • SQL Server Management Tools • SQL Server Databases • Backup and Restore • SQL Server Security • SQL Server Agent • SQL Server High Availability
25.07.2022 - 27.07.2022	<p>Data Science & Python Module: Introduction to Statistics, Introduction to Machine Learning + Models, Introduction to Deep Learning Models</p> <p>Introduction to Statistics:</p> <ul style="list-style-type: none"> • Population, Observational Study, Experimental Study • Mean, Median, Quartiles, Range, Interquartile Range, Variance, Standard Deviation • Normal distribution • Z score, Detecting outliers • Covariance, Correlation • Hypothesis Testing, Null Hypothesis, Alternative Hypothesis, Type I error, Type II error) <p>Introduction to Machine Learning + Models:</p> <ul style="list-style-type: none"> • AI, Machine Learning, Deep Learning, Data Science • Models and parameters, training and inference • Supervised/unsupervised/reinforcement learning • Prepare data for ML models • Regression model • Classification model

	<ul style="list-style-type: none"> • Clustering model <p>Introduction to Deep Learning Models:</p> <ul style="list-style-type: none"> • ANN • RNN + LSTM • CNN + YOLO
28.07.2022 - 01.08.2022	Microsoft Azure Module: Cloud concepts, Core Azure services, Security
02.08.2022 - 04.08.2022	<p>Power BI Module: Introduction, Data Sources & Transformation, Introduction to DAX + Visuals</p> <p>Tableau Module: Introduction</p> <p>Introduction to PowerBI:</p> <ul style="list-style-type: none"> • Development from Power BI (Excel Power Tools) • Power BI Key Concepts & Functionalities <p>Data Sources & Transformation:</p> <ul style="list-style-type: none"> • Data Sources; Loading & Updating Data • Connecting to a File Folder • Data Preparation & Transformation • Power Query M • Cleansing Unclean Data • Data Model • Parameters & functions • Establishing Relationships <p>Introduction to DAX + Visuals:</p> <ul style="list-style-type: none"> • DAX, DAX Studio. Tabular Editor • Troubleshooting and Performance Tuning • Asymmetric Matrix/ Visuals • Creating Calculated Columns and Measures with DAX • Interactive Visuals and Filter • Creating a Power BI Report <p>Introduction to Tableau:</p> <ul style="list-style-type: none"> • General Tableau Presentation and Main Aspects of Workbooks • Working on Individual Workbooks & Dashboards
05.08.2022 – 09.08.2022	Data Automation Module: Introduction to Microsoft Power Platform & Dataverse, Power Apps, Power Automate
10.08.2022 - 02.09.2022	<p>“Real Estate Reporting” Final Project:</p> <ol style="list-style-type: none"> 1. 10.08.2022 - 16.08.2022 – Data Ingestion and Data Preparation (using Power Apps, Power Automate, Microsoft SQL) 2. 17.08.2022 – 22.08.2022 – Model Implementation (using Python and Data Science concepts) 3. 23.08.2022 – 29.08.2022 – Data Visualization (using PowerBI) 4. 30.08.2022 – 31.08.2022 – Final review and preparation for Demo 5. 01.09.2022 – 02.09.2022 – Demo and Feedback