

Diary Entry - Week 4

Date: 05-08-2024 to 09-08-2024

Summary:

Week 4 was characterized by an exploration into web scraping techniques, SQL fundamentals, advanced regression modeling, and an introduction to deep learning concepts. Additionally, coursework focusing on logistic and linear regression further solidified understanding in predictive modeling techniques.

Web Scraping:

- Delved into the practice of web scraping, acquiring techniques to extract data from websites using Python libraries such as BeautifulSoup and Scrapy.
- Explored ethical considerations and best practices in web scraping, ensuring compliance with legal and ethical guidelines while accessing web data.

SQL Fundamentals:

- Received an introduction to Structured Query Language (SQL), a powerful tool for managing and querying relational databases.
- Learned fundamental SQL syntax for database creation, data manipulation, and retrieval, gaining proficiency in writing basic SQL queries.

Linear and Logistic Regression:

- Advanced understanding of linear and logistic regression models, exploring advanced concepts such as regularization techniques and model diagnostics.
- Engaged in practical exercises to apply regression models to real-world datasets, evaluating model performance and interpreting results effectively.

Introduction to Deep Learning:

- Introduced to deep learning concepts, understanding the architecture and principles of neural networks.
- Explored basic neural network architectures, activation functions, and optimization algorithms, laying the groundwork for deeper exploration into deep learning methodologies.

Coursework on Logistic and Linear Regression:

- Participated in coursework focusing on logistic and linear regression, applying theoretical knowledge to practical problem-solving scenarios.
- Engaged in hands-on exercises and projects to analyze datasets, build regression models, and interpret model outputs, enhancing proficiency in regression modeling techniques.

Reflection:

Week 4 was a dynamic blend of theoretical exploration and practical application across various domains, including web scraping, SQL, regression modeling, and deep learning. The coursework provided valuable hands-on experience, reinforcing theoretical concepts and fostering a deeper understanding of complex methodologies.

WEEK <i>at a glance</i>	
Monday 05th Aug	08:00 AM- Machine Learning 03:00 PM- Pandas and Overview of OOPs
Tuesday 06th Aug	03:00 PM- Object Oriented Programming 05:00 PM- Intern Catchup Session
Wednesday 07th Aug	03:00 PM- Object Oriented Programming
Thursday 08th Aug	08:00 AM- Machine Learning 03:00 PM- Conditional Statements and Loops
Friday 09th Aug	08:00 AM- Data Structures and Algorithms 02:00 PM- Doubt Session on Linear Regression