

Day 5 – 20 June 2025 (Friday): Libraries and API Integration

The fifth day of the internship focused on expanding our Python skills by introducing us to **important data-handling libraries** and **API integration concepts**. The session began with an overview of **NumPy**, where we learned how arrays can be used to perform fast and efficient mathematical operations compared to normal Python lists. We practiced array creation, reshaping, and basic numerical computations..

In the second half of the session, we were introduced to the concept of **APIs (Application Programming Interfaces)**. Using Python's `requests` module, we learned how to send and receive data from web servers through **JSON responses**. The mentor explained how APIs act as bridges between applications, enabling **real-time data exchange** — a concept that would later be essential in our n8n and CrewAI projects.

Learning Outcome:

Gained practical understanding of key Python libraries (NumPy, Pandas, Matplotlib) and learned how to integrate APIs for dynamic data communication. Strengthened the foundation for automation and AI-based workflows.