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Thesis

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Field: **Computer Science**

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Topic

**Comparative study between the different Data Lakes
architectures and their technologies**

Presented by :

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Abstract

In the era of data-driven decision-making, organizations are increasingly turning to Data Lakes as a vital component of their data management strategies. Data Lakes offer the promise of scalability, flexibility, and the ability to handle diverse data types. However, the landscape of Data Lake architectures and the technologies used to build and manage them is vast and continually evolving. This comparative study seeks to shed light on the various Data Lake architectures and the technologies that support them. By examining the strengths and weaknesses of different approaches, from on-premises to cloud-based solutions, and exploring the array of tools and frameworks available, this study aims to provide a comprehensive understanding of the options available to organizations looking to harness the full potential of their data assets.

Keywords : Big Data, Data Lakes, Data Lakes architectures, Metadata, Data Types, Hadoop