Designing Microservice-based Applications for Hybrid Cloud Edge Networks

Undergraduate Thesis

by

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Abstract

Edge computing has been the subject of much attention in the software development space over the last several years as the limitations of traditional cloud computing models continue to be exposed by an increasing number of connected IoT and internet-enabled devices that require real-time computing. As this new computing paradigm becomes more prevalent in the industry, it is important that software is developed effectively to take advantage of the benefits that edge computing brings to the table.

In this paper, we attempt to establish an understanding of core principles that will enable the effective design and development of distributed software systems that can be easily deployed and optimized for various configurations of computing models – primarily hybrid cloud edge networks.

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