Technische Universität München
Chair for Network Architectures and Services
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Master Thesis
You?

Implementing and Evaluating a Data-Centric P2P Network

C++ Data-Centric P2P

background

Over the past six years I developed an operating system for future smart spaces together with changing student teams.
The core of the system is the Virtual State Layer (VSL) middleware. It is currently implemented as a prototype in Java.

This thesis is about reimplementing the VSL in C++ with a focus on small footprint, fast resource efficient execution, and good code quality (including automated testing, and documentation).

your task

A possible rough work plan could be:

1. Go through the VSL tutorial to get familiar with the system.
2. Go through the VSL documentation, code, etc. to understand its design and implementation.
3. Identify existing comparable middleware for the performance evaluation.
4. Identify optimization techniques for your implementation. Which code validations can be done?
5. Implement.
6. Design and implement suitable tests for performance, scalability, and resource usage.
7. Compare your implementation with the other identified implementations.
8. Identify bottlenecks, optimize them.

time

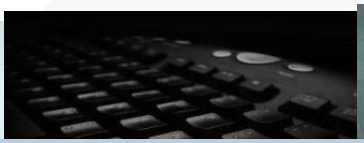
~6 month + initial preparation.

required

Interest in working on new technologies; Java; Dedication.

If you are interested in the topic send me an email explaining why you are suitable for the topic. Then we can make an appointment.



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