Detailed Performance Measurements of the VSL P2P System

Outline
Smart Spaces are spaces where you can control functionality of the environment via software. We are developing a middleware for this task for several years now. It is called Virtual State Layer (VSL).
An important aspect when managing Smart Spaces is latency. The faster the VSL middleware reacts, the better. In this work you will design automated performance measurement tests in different setups and testbeds to continuously monitor the performance of the VSL. In case you produce good results, they will be integrated into our continuous integration infrastructure.

Possible Structure
- Analysis
  - Review on performance measurement patterns and techniques.
  - Analysis of the VSL for identifying relevant measurements.
- Related work
  - What do other projects do that answer related questions?
- Design
  - Which components do you need?
  - Which are options for the design? Why are your choices good?
- Implementation
  - Frameworks used, screenshots, etc.
- Evaluation
  - How well does it work?
    - Metrics!

Requirements
Curiosity, Joy to work in a team, Knowledge in Java.
Ability to write good code (including unit tests and documentation).

Contact
If you are interested, please send an email briefly explaining why you think to be the right person for this thesis to:

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Image sources:
http://www.eclipse.org/smarthome/