

# **My Seminar Topic**

Jonas Frey

Institute of Information Security and Dependability (KASTEL)

Advisor: M.Sc. My Advisor

English abstract.

Keywords

## **1 Introduction**

Motivation/Introduction into the topic/paper.

## **2 Foundation**

General foundation knowledge.

### **2.1 Architecture Extraction**

Explanation of Architecture Extraction.

### **2.2 PCM**

Explanation of the Palladio Component Model.

## **3 Study Design**

Explain how the literature research is done.

### **3.1 Study Aim**

Explain the goal of the paper.

### **3.2 Research Questions**

The research questions I want to answer in this paper.

### 3.3 Selecting the Papers

Explanation of how I searched for the papers. The keywords I used and the selection criteria (inclusion/exclusion). Also, a table containing the papers I found.

Async Papers:

1. [5] (MOM)
2. [1] (MOM)
3. [2] (MOM)
4. [4] (HTTP)
5. [3] (HTTP)

## 4 Results

Answers to the research questions. Analysis of the papers I found.

## 5 Discussion

Not sure if I need this section.

## 6 Threats to Validity

Explain the threats to internal and external validity of the study.

## 7 Related Work

Other papers that are similar to my paper.

## 8 Conclusion

The final conclusions of this paper.

## References

- [1] Nuha Alshuqayran, Nour Ali, and Roger Evans. “(MiSAR) Towards Micro Service Architecture Recovery: An Empirical Study”. In: 2018. doi: 10 . 1109 / ICSA . 2018 . 00014.

- 
- [2] Fabian Brosig, Nikolaus Huber, and Samuel Kounev. “Automated extraction of architecture-level performance models of distributed component-based systems”. In: IEEE, Nov. 2011, pp. 183–192. ISBN: 978-1-4577-1639-3. DOI: 10.1109/ASE.2011.6100052.
  - [3] Martin Kleehaus et al. “MICROLYZE: A framework for recovering the software architecture in microservice-based environments”. In: vol. 317. 2018. DOI: 10.1007/978-3-319-92901-9\_14.
  - [4] Benjamin Mayer and Rainer Weinreich. “An Approach to Extract the Architecture of Microservice-Based Software Systems”. In: 2018. DOI: 10.1109/SOSE.2018.00012.
  - [5] Snigdha Singh, Dominik Werle, and Anne Koziolk. “ARCHI4MOM: Using Tracing Information to Extract the Architecture of Microservice-Based Systems from Message-Oriented Middleware”. In: *European Conference on Software Architecture* (2022).