

# **From Monolith to Microservices: A not yet defined Approach**

Bachelor's Thesis of

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I declare that I have developed and written the enclosed thesis completely by myself, and have not used sources or means without declaration in the text.

**PLACE, DATE**

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(Niko Benkler)



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Bla Sbtrakt



# Abstract

English abstract.





# **Zusammenfassung**

Deutsche Zusammenfassung



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# **1. Introduction**

## **1.1. Motivation**

## **1.2. Problem Statement**

## **1.3. Challenges**



## **2. CoCoME**

### **2.1. Introduction to CoCoME**

[7]



## **3. State of the Art**

### **3.1. Literature Review**

### **3.2. Comparison and applicability of the approaches**

Link	Titel	Author (Year)	Origin	Search String
[6]	Extraction of Microservices from Monolithic Software Architectures	G. Matzlami et. al. (2017)	Google Scholar	<i>microservice identification</i>
[1]	Object-Aware Identification of Microservice	M. J. Amiri (2018)	IEEE	<i>identification microservices</i>
[2]	Microservices Identification Through Interface Analysis	L. Baresi et. al. (2017)	google scholar	<i>microservice identification</i>
[9]	Identifying Microservices Using Functional Decomposition	S. Tyszberowicz et. al. (2018)	<i>provided</i>	<i>n/a</i>
[8]	Partitioning Microservices: A Domain Engineering Approach	I. J. Munezero et. al. (2018)	IEEE	<i>identify microservices</i>
[3]	From Monolith to Microservices: A Dataflow-Driven Approach	R.Chen et. al	IEEE	monolith to microservice
[4]	Function-Splitting Heuristics for Discovery of Microservices in Enterprise Systems	A. De Alwis et. al. (2018 )	Google Scholar	identify microservices
[5]	Service Cutter: A Systematic Approach to Service Decomposition	M. Gysel et. al. (2016)	[2]	<i>n/a</i>

## **4. Solution Overview**





## **5. Evaluation Planning**

### **5.1. Applicability to CoCoME**

### **5.2. Comparison to Functional Decomposition Approach**



## **6. Timetable**

### **6.1. Milestones**



# Bibliography

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- [5] Michael Gysel et al. “Service Cutter: A Systematic Approach to Service Decomposition”. In: (2016). Ed. by Marco Aiello et al., pp. 185–200.
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- [8] I. J. Munezero et al. “Partitioning Microservices: A Domain Engineering Approach”. In: (May 2018), pp. 43–49.
- [9] Shmuel Tyszberowicz et al. “Identifying Microservices Using Functional Decomposition”. In: (2018). Ed. by Xinyu Feng, Markus Müller-Olm, and Zijiang Yang, pp. 50–65.



# A. Appendix

## A.1. First Appendix Section

Figure A.1.: A figure

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