



## **DEPARTMENT OF INFORMATICS**

UNIVERSITY OF APPLIED SCIENCES DÜSSELDORF

Bachelor's Thesis in  
Electrical-Engineering and Information Technology

### **Development of a Confined Spaces Dispatch Software for a Canadian Fire Brigade**

André Kuhlmann



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### **Development of a Confined Spaces Dispatch Software for a Canadian Fire Brigade**

Entwicklung einer Einsatzleitsoftware für beengte  
Räume für eine kanadische Feuerwehrwache

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<b>Submission date:</b>	2022-07-19

*I confirm that the submitted thesis is original work and  
was written by me without further assistance.  
Appropriate credit has been given where reference has  
been made to the work of others.*

*Düsseldorf, 2022-07-19*

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## **Abstract**

This work focuses on designing an application ecosystem for a Canadian fire department. As it is part of the critical infrastructure, safety and code quality is of main concern. The thesis will go over the complete development life cycle, from planning to the actual implementation of a Computer-Aided Dispatch software for confined spaces.

It is looked into the Canadian legislation to derive application flows and data structure from it. At the end the reader will have a thorough understanding of confined spaces and how to come up with a working application infrastructure.

## **Index Terms**

Software Development - NG911 - Confined Spaces