

# **Proposal Bachelor's Thesis**

Development and Evaluation of a Hybrid Approach  
for Automated Error Detection and Classification in  
LoRaWAN-Based IoT Data Pipelines Using Log Data

Emir Hamulic

University of Applied Sciences Technikum Wien

**Student ID:** wi23b168

**Study Program:** B.Sc. Business Informatics

**Advisor:** Rohatsch Lukas, MSc

**Version:** 0.1

**Date:** January 17, 2026

## **1. Problem Area**

## 2. Task Description

### **3. Research Questions / Hypotheses**

**Main Research Question: Sub-Questions:**

## 4. Methodology

## 5. Kind of expected results

### 5.1. Overview Research Questions - Methodology - Expected Results

Research questions / (hypotheses)	Method(s) per research question	Expected kind of result per method
RQ1: ...	...	...
RQ1: ...	...	...
RQ2: ...	...	...
RQ3: ...	...	...
RQ4: ...	...	...

Table 1: Mapping research questions to methods and expected results.

## 6. Timetable

### 6.1. Milestone Plan

Nr	Name	Plan	Adapted by	Actual Date
M1	...	...	...	...
M2	...	...	...	...
M3	...	...	...	...
M4	...	...	...	...
M5	...	...	...	...

Table 2: Milestones plan vs. actuals.