



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

## ANSIAN - ANDROID SIGNAL ANALYZER

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Secure Mobile Networking Lab  
Department of Computer Science



AnSiAn - Android Signal Analyzer  
SEEMOO Secure Networking Lab

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## ABSTRACT

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## ZUSAMMENFASSUNG

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Part I

PROJECT REPORT



## INTRODUCTION

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Introduction: TODO; Explain AnSiAn

### 1.1 PROJECT DEFINITION

#### 1.1.1 *Features*

##### 1.1.1.1 *Must-Have*

- RDS (Channel Name, Radio Text, Time)
- PSK<sub>31</sub>
- Extract RDS-, Morse and PSK<sub>31</sub>-Text to file
- rad10 support (for receiving)
- sending with HackRF and rad10
  - replay I/O samples
  - generate and send morse code from text
  - FM audio modulation

##### 1.1.1.2 *Nice-to-Have*

- Walkie-Talkie Mode
- Packet Radio
  - receive
  - maybe even send?

#### 1.1.2 *Time Schedule*

##### 1.1.2.1 *Sprint 1: alpha version (due 09.06.)*

- RDS
- PSK<sub>31</sub>
- Extract RDS-, Morse and PSK<sub>31</sub>-Text to file

1.1.2.2 *Sprint 2: beta version (due 21.07.)*

- rad10 support (for receiving)
- sending with HackRF and rad10
  - replay I/O samples
  - generate and send morse code from text
  - FM audio modulation

1.1.2.3 *Sprint 3: final version (due 25.08.)*

- complete leftovers from previous sprints
- Walkie-Talkie Mode ?
- Packet Radio ?

## ERKLÄRUNG

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Hiermit versichere ich gemäß der Allgemeinen Prüfungsbestimmungen der Technischen Universität Darmstadt (APB) § 23 (7), die vorliegende Masterarbeit ohne Hilfe Dritter und nur mit den angegebenen Quellen und Hilfsmitteln angefertigt zu haben. Alle Stellen, die aus den Quellen entnommen wurden, sind als solche kenntlich gemacht worden. Diese Arbeit hat in gleicher oder ähnlicher Form noch keiner Prüfungsbehörde vorgelegen.

*Darmstadt, 28. April 2016*

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