

# **Welcome to The AMOS Demo Day!**

---

Dirk Riehle, Univ. Erlangen

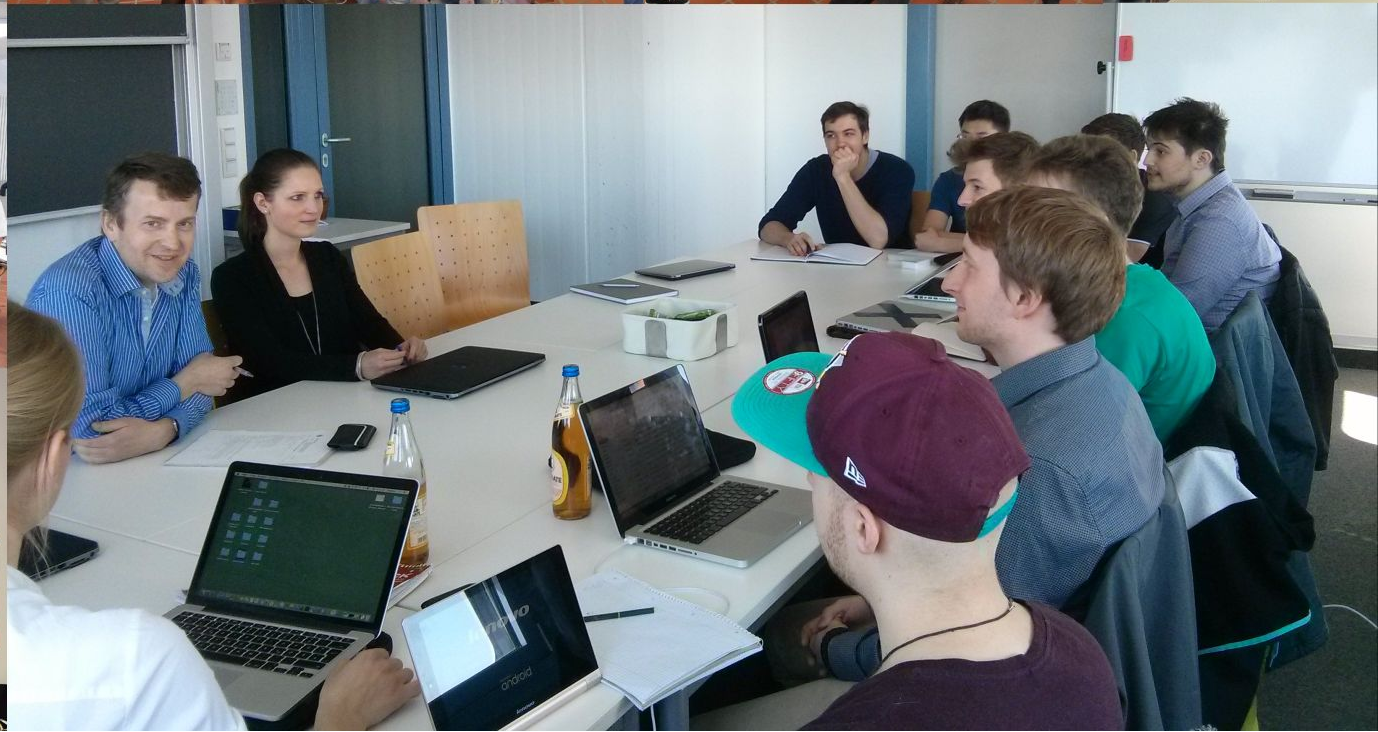
**AMOS C02**

Licensed under [CC BY 4.0 International](https://creativecommons.org/licenses/by/4.0/)

# The Professorship of Open Source Software







# Industry Partners



ACTANO

adorsys



CONSILEON



GRAU DATA

Hisense



MekTEC

msg

NEWSTORE



Raiffeisen Bank International



SENACOR

SEALSYSTEMS

SICK  
Sensor Intelligence.

SIEMENS

SIEMENS  
energy

SIEMENS  
Healthineers

SOLYP

software AG



Volkswagen

weber

WSAudiology



# Participating Universities

---



Friedrich-Alexander-Universität  
Erlangen-Nürnberg

Technische  
Universität  
Berlin



Freie Universität



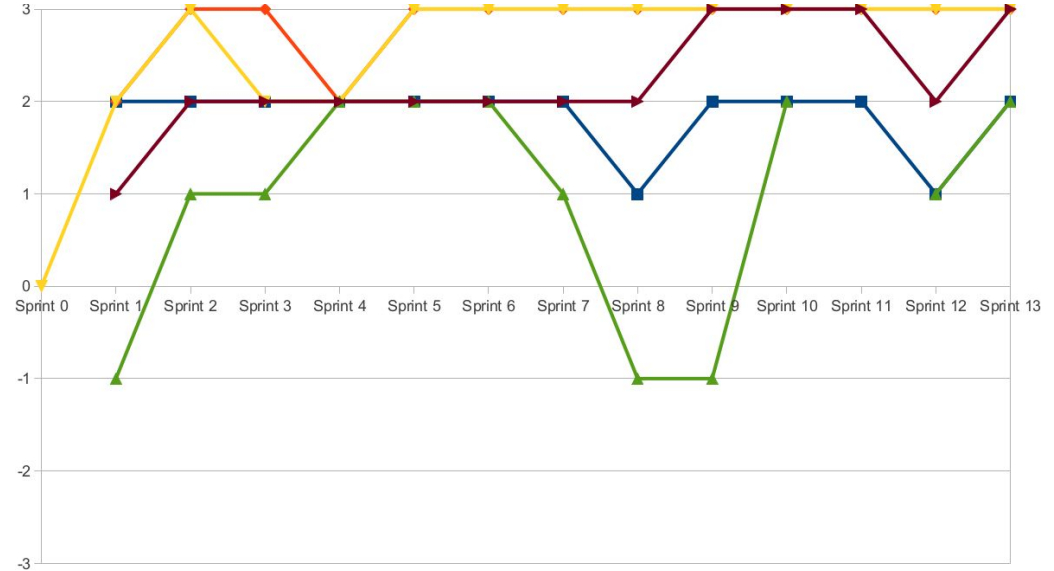
Berlin

# Distributed Scrum Teams





# Project Coaching and Support



# Demo Day Schedule

Time	Duration	Responsible	Title	Room
10:15	10 min	Riehle	Introduction	Main room
10:25	10 min	Teams	One slide summary	Main room
10:35	20 min	Teams	Demo	Demo rooms
10:55	20 min	Teams	Demo	Demo rooms
11:15	20 min	Teams	Demo	Demo rooms
11:35	5 min	Riehle	Conclusions	Main room

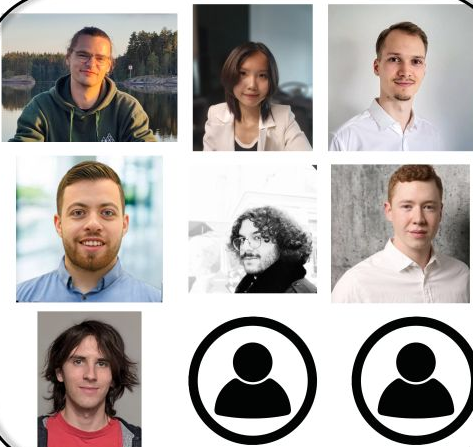


# This Semester's Projects

#	Project	Industry Partner
1	RTDIP Data Quality Checker	Shell
2	Backup Metadata Analyzer	SEP
3	Android Zero Instrumentation	e.solutions
4	Personalized Play	MUMBI
5	–	
6	–	
7	–	
8	–	

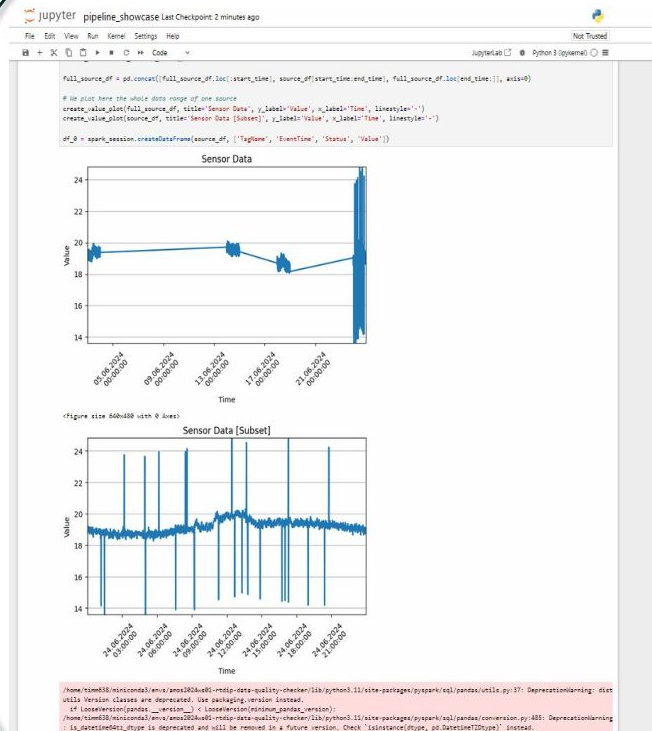
## Motivation

To develop robust tools for detecting missing data, outliers, duplicates, and irregularities in real-time data streams, ensuring scalable solutions aligned with RTDIP guidelines.



## Key Project Features

- Data Validation & Schema Enforcement
- Advanced Data Cleansing
- Missing Value Imputation
- Data Normalization
- Real-Time Anomaly Detection
- Predictive Data Analytics
- Data Monitoring & Integrity Checks





# Metadata Analyzer

A powerful software solution designed to help companies monitor, analyze, and optimize their backup systems.

**The Team:** Lara Sulzbach, Oliver Schnell, Amelie Regl, Florian Oberndörfer, Christoph Klingenberg, Deniz Deli, Dirk Engelhard, Valentin Garbe, Moritz Rauen

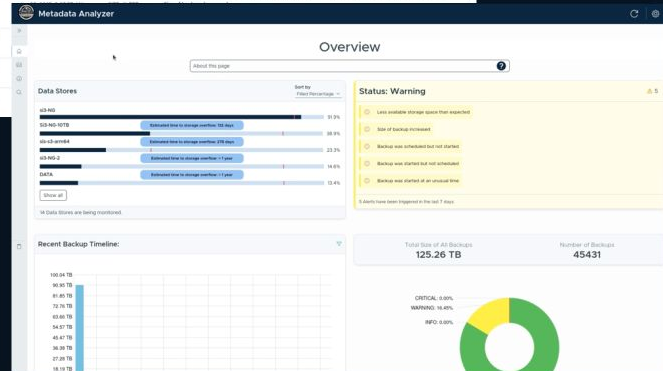
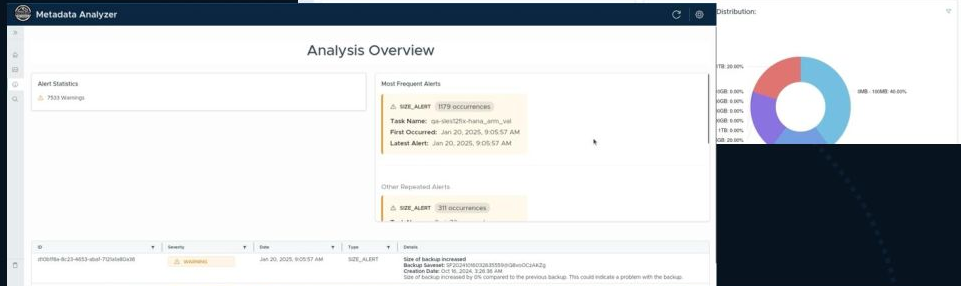
\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

Metadata Analyzer

### Backups Statistics

All Backups:

Item	Size	Type	Creation Date	Excluded Date
foo	1 MB	FILE	28.10.2025 10:03	28.10.2025 10:03
mylog	2.9 MB	FILE	24.10.2025 17:18	24.10.2025 17:18
mylog	100 MB	FILE	1.10.2025 22:29	1.10.2025 22:29
IC2Q2402000007080676060PFC	4.27 MB	FILE	07.10.2025 02:00	07.10.2025 02:00
mylog	105 TB	FILE	08.10.2025 11:37	08.10.2025 11:37
IC2Q2402000007080676060PFC	14.00 MB	FILE	27.10.2024 07:18	27.10.2024 07:18
IC2Q2402000007080676060PFC	302 B	INCREMENTAL	27.10.2024 07:30	27.10.2024 07:30
IC2Q2402000007080676060PFC	907 MB	COPY	27.10.2024 07:32	27.10.2024 07:32
IC2Q2402000007080676060PFC	5.04 MB	COPY	27.10.2024 07:32	27.10.2024 07:32
IC2Q2402000007080676060PFC	138 MB	INCREMENTAL	27.10.2024 07:32	27.10.2024 07:32



# ZERO INSTRUMENTATION OBSERVABILITY FOR ANDROID™



TRACING  
EVENTS & SYSTEM-CALLS  
ON ANDROID-DEVICES



DEBUGGING  
SOFTWARE WITHOUT  
DEDICATED DEBUG-BUILDS





Did you know that about 90% of brain development occurs in the first 5 years of a child's life?



Parents, let's rethink play.

Children's access to play has declined by more than 50% in the last 50 years.



*Simple, everyday play.*

1



Open the app and take a picture of the items you have at hand.

2



Let our AI agent tailor a play activity using those items.

3



Support the mental & emotional development of your child through play.

Transform your kitchen, living room, or laundry room into the next playroom with your children!



Toys often lead to clutter and almost 80% of toys end up in landfills.





# **Let's go see the demos!**

---

Please join a breakout session [1]

[1] If you don't see a choice window, please look to Breakout rooms in the menu bar or under More



FRIEDRICH-ALEXANDER  
UNIVERSITÄT  
ERLANGEN-NÜRNBERG  
FACULTY OF ENGINEERING

**Prof. Dr. Dirk Riehle**

Department of Computer Science  
Head of Open Source Research Group  
Martensstr. 3, 91058 ERLANGEN, GERMANY  
Phone +49 9131/85-28390  
Fax +49 9131/85-64055  
dirk.riehle@fau.de  
<http://osr.cs.fau.de>

# Thank you! Any questions?

---

[dirk.riehle@fau.de](mailto:dirk.riehle@fau.de) – <https://oss.cs.fau.de>

[dirk@riehle.org](mailto:dirk@riehle.org) – <https://dirkriehle.com> – [@dirkriehle](#)

# Legal Notices

---

## License

- Licensed under the [CC BY 4.0 International](https://creativecommons.org/licenses/by/4.0/) license

## Copyright

- © Copyright 2009, 2024 Dirk Riehle, some rights reserved