Welcome to the RIOT Summit 2023

We will start at 11:30am.
Welcome to the Heart of Europe

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00am - 11:30am</td>
<td>Tutorial</td>
</tr>
<tr>
<td>11:30am - 12:30pm</td>
<td>Welcome &amp; Keynote</td>
</tr>
<tr>
<td>12:30pm - 01:45pm</td>
<td>Lunch in the Canteen</td>
</tr>
<tr>
<td>01:45pm - 03:15pm</td>
<td>Session Networking (Chair: Ben)</td>
</tr>
<tr>
<td>03:15pm - 03:45pm</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>03:45pm - 05:15pm</td>
<td>Session System (Chair: José)</td>
</tr>
<tr>
<td>05:15pm - 05:45pm</td>
<td>Breakout Session Planning</td>
</tr>
<tr>
<td>06:20pm</td>
<td>Departure for Social Event</td>
</tr>
<tr>
<td>07:00pm</td>
<td>Social Event at Zum Rad</td>
</tr>
</tbody>
</table>
Schedule: Monday

09:00am – 11:30am  
Tutorial

11:30am – 12:30pm  
Welcome & Keynote

12:30pm – 01:45pm  
Lunch in the Canteen

01:45pm – 03:15pm  
Session Networking (Chair: Ben)

03:15pm – 03:45pm  
Coffee Break

03:45pm – 05:15pm  
Session System (Chair: José)

05:15pm – 05:45pm  
Breakout Session Planning (*Your input is needed!*)

06:20pm  
Departure for Social Event

07:00pm  
Social Event at Zum Rad
## Schedule: Tuesday

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00am – 10:30am</td>
<td>General Assembly (Your input is needed!)</td>
</tr>
<tr>
<td>10:30am – 12:30pm</td>
<td>Breakout Sessions</td>
</tr>
<tr>
<td>12:30pm – 01:30pm</td>
<td>Pizza!</td>
</tr>
<tr>
<td>01:30pm – 03:00pm</td>
<td>Session Security (Chair: Emmanuel)</td>
</tr>
<tr>
<td>03:00pm – 03:30pm</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>03:30pm – 05:00pm</td>
<td>Session Applications (Chair: Christian)</td>
</tr>
<tr>
<td>05:00pm – 05:15pm</td>
<td>Open Mic</td>
</tr>
<tr>
<td>05:15pm – 05:30pm</td>
<td>Wrap Up</td>
</tr>
</tbody>
</table>

---

1. [https://pad.riot-os.org/s/SNhel2FHb#](https://pad.riot-os.org/s/SNhel2FHb#)
The Venue

Groundfloor

4-8
Sessions
General Assembly

Canteen
Restrooms
Registration Desk

Upstairs

4-112
Coffee Breaks
Lunch (Tuesday)
Demos

4-111
Tutorial
Lunch (Tuesday)
Breakout Session

4-110
Breakout Session

4-109
Breakout Session

Restrooms
coap://coap.summit.riot-os.org

Provides information about the agenda, the location, and the current event:
coap://coap.summit.riot-os.org/agenda[?day=<DAY>]
coap://coap.summit.riot-os.org/now
coap://coap.summit.riot-os.org/location
   ?lon=<LON>&lat=<LAT>&mode=(walking|transit|driving)]

There is also a Matrix Chat Room for the Summit.
Social Event

- Zum Rad is one of the oldest traditional restaurants in Frankfurt
- Don't miss their self-made Ebbelwoi or Süßer
- We go there together via Bus Transfer
  Please be at the Departure Point on time!
- To go back take the public Bus (line M43 towards Bornheim Mitte)
- Walking back to the University is about 4 km

Location

Zum Rad
Leonhardsgasse 2
Frankfurt-Seckbach
Departure
We have a Code of Conduct

Points of Contact:

- Martine (@miri64)
- Oleg (@OlegHahm)
Social Media

Talk about it!

#RIOTSummit2023
Thanks!

The Community!

The Speakers!

Frankfurt University of Applied Sciences and the International Office
Short Recap
RIOT in a Nutshell

Connecting the Things ...

- Runs on tiny Microcontrollers with 10+ kB RAM

...to the Internet.

- Support the full IP Network Stack

Free and Open Software

- No Vendor Lock-In or Limitations to a Hardware Provider

Driven by a Grass Roots Community

- Following the Linux Way

Well-maintained, documented, and tested Code

- Used by Industry Users for Years
Latest Features since Summit 22

**Hardware**

20 new **Boards** supported

- ESP32C Kits, HiP Badge, Olimex MSP430, Sipeed Longan Nano...

**Added Support for the Mass Storage Class in USB**

- Exposing a MTD as Storage Device to the Host Computer

**On demand ztimers**

- Allow for implicit power management
Latest Features since Summit 22

System and Infrastructure

Priority Inheritance in OS Mutexes
Prevent Priority Inversion Issues

Integration of FlashDB
A Timeseries and Key-Value Database for Flash Memory

Building in Podman
Build RIOT in a Container Environment without requiring root privileges

Using GitHub Security Advisories
Multiple vulnerabilities in GNRC have been reported and fixed
Latest Features since Summit 22

Networking

BLE as Downlink in Border Router

Connecting BLE networks seamlessly to the Internet

Support for CongURE

The congestion control mechanism of the QUIC protocol

Integration of libSCHC

Static Context Header Compression and Fragmentation for LPWANs