FOSDEM

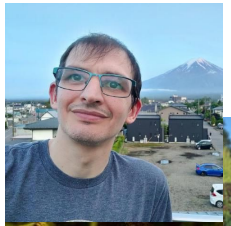
Robotics and Simulation devroom

31st of January 2026

fosdem.org/2026/schedule/track/robotics-and-simulation/

Who are we

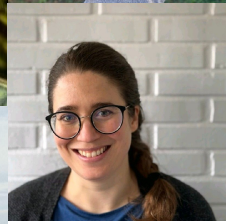
Arnaud Taffanel (Bitcraze)



Lucas Chiesa (Ekumen)

Fred Gurr (Eclipse Foundation)

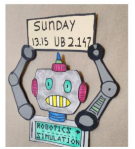
Mat Sadowski (Foxglove)



Kimberly McGuire (McGuire Robotics)

Robotics and Simulation devroom history

- Open Source Robotics Bird of Feather organized at Fosdem 2024
  - Confirmed interest and allowed to identified interested people
  - Impromptu lightning talk/project showcase!
- First Robotics and Simulation devroom at Fosdem 2025!
  - Half a day
  - Way more proposal than talking spots
- Now the second devroom at Fosdem 2026!
  - Full day!
  - Still more proposal than space available



Some open-source robotics

GAZEBO

MuJoCo

ARGoS
Large-scale robot simulations

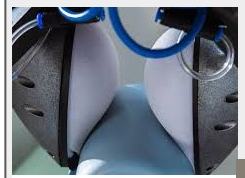
PX4 autopilot

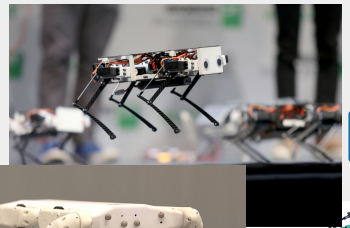
INAV

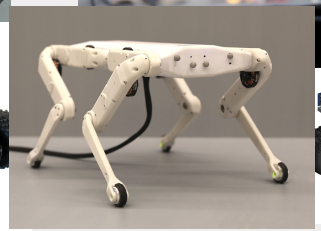
BETAFLIGHT

ARDUPILOT

LibrePilot







ROS

YARP

dora-rs

29 Cu

MRPT

Q&A, Discussion and Live Stream

matrix

#2026-robotics-and-simulation:fosdem.org

Schedule

Event	Speakers	Start (UTC+1)	End (UTC+1)
Saturday			
Welcome to the Robotics and Simulation devroom	Arnaud Taffanel	10:30	10:35
"Turning a cheap commercial vacuum cleaner into a useful Open Source mapping tool"	Stef Dillo	10:35	11:00
Calibrate good times! The tools and methods to get top-quality robot data.	Roland Meertens, Sam Pfeiffer	11:05	11:30
Bridging robotics and systems programming: Why Copper-rs is a game changer	Guillaume BINET	11:35	12:00
Apptainer: Easy Containerization for Robotics	Malte Schrader	12:05	12:10
Just1 - An Open-Source Autonomous Mecanum Wheel Robot	Nicolas Rodriguez	12:10	12:15
Modernizing ROS 2 Skills: Hacking and Orchestrating Cloud Brains, Physical Sensors, and the Network	Miguel Xochicale	12:15	12:20
Benchmarking platform for robot localization systems	Júlia Marsal	12:20	12:25
rosidlcpp: A Journey Through ROS2 Build Time Optimization	Anthony Welte	12:25	12:30
A Core Developer's insights on Gazebo's Future	Jose Luis Rivero	12:35	13:20
Introducing rclrs: the official ROS 2 client library for Rust	Esteve Fernández	13:25	13:50
Open-Source Robotics in Practice: Lessons from Upkie Wheeled Bipeds	Stéphane Caron	13:55	14:20
Middleware Pain? Meet iceoryx2	Michael Poehnl	14:25	14:50
Precision Landing with PX4 and ROS 2 using Aruco Markers	Ramon Roche, Beniamino Pozzan	14:55	15:20
Simple, Safe, Open: Building Your First ROS 2 Rover with Rust and Pixi	Christophe Simon, Nicolas Daube	15:25	15:35
Vehicle Dynamics Sim: accurately and easily simulate actuation limits	Arne Baeyens	15:35	15:45
Productionising ROS when you have no choice (with Bazel)	Ricardo Delfin	15:45	15:55
ArduPilot Advanced Integration	PIERRE KANCIR	15:55	16:05
The Technical Stacks Behind Botronics' iXi Autonomous Golf Trolley	Antoine Van Malleghem, Enzo Ghisoni, David Moli	16:10	16:55
ROS-Z: A Rust/Zenoh-native stack, fully ROS 2-compliant	Julien Enoch, Yuyuan Yuan	17:00	17:25
EasyNav: An open-source framework for navigating everywhere	Francisco Martín Rico, Francisco Miguel Moreno	17:30	17:55
AutoAPMS: Lightweight and versatile integration of behavior trees into the ROS 2 ecosystem	Robin Müller	18:00	18:25
PlotJuggler: the log visualization tool loved by roboticists	Davide Faconti	18:30	18:55

https://fosdem.org/2026/schedule/track/robotics-and-simulation/