

Spiderino Workshop

Programming Workshop

Lakeside Labs GmbH

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Spiderino

You heard about Artificial Intelligence and / or Swarm Intelligence and always wanted to know what it is and how it works? You would like to program a robot but never tried it before or never had the chance to do it? You don't have a technical background and are interested in how basic functions in robots are implemented? Then you should join our workshop on programming Spiderinos.

The Spiderino is a low-cost robot platform for research and educational purposes. It is based on the Hexbug Spider toy and features therefore a small size. To equip the toy with intelligence and processing power, it has been extended with a 3D-printed adapter that includes multiple sensors, a larger battery, and a printed circuit board (PCB) with Arduino microcontroller, a Wi-Fi module, and a motor controller. The robot can be programmed via text-based or block-based approaches and is thus suitable for swarm robotic experiments and educational purposes.



What will you gain from this workshop?

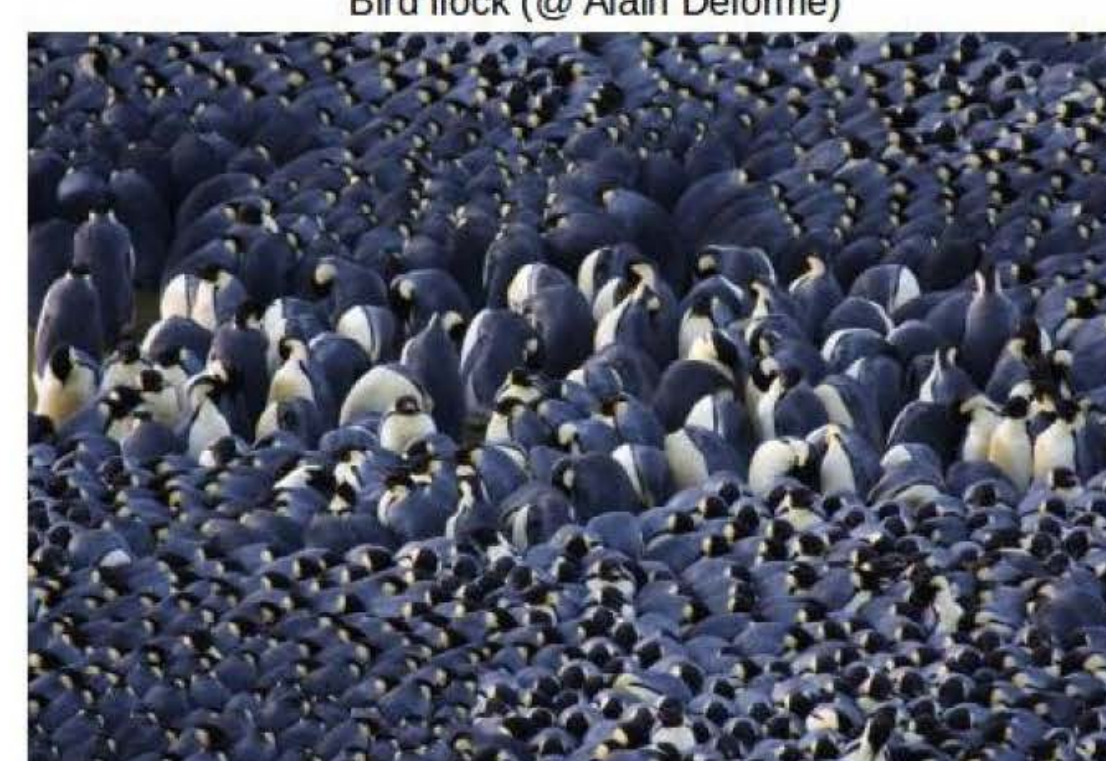
1. A basic understanding of swarm intelligence, swarm robotics, and the Spiderino platform
2. Gathering programming knowledge by implementing basic Spiderino tasks using Arduino IDE
3. Hands-on experience with sensors
4. Creating a demo: Approach a light source & avoid obstacles.



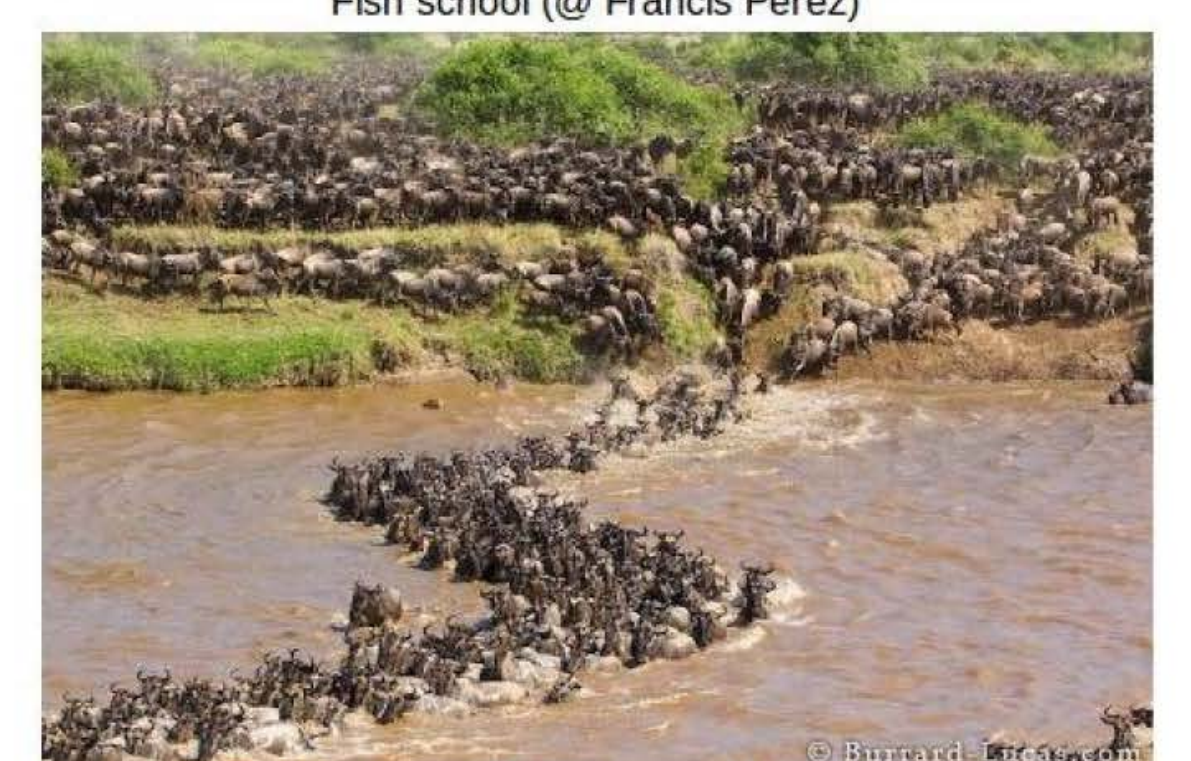
Bird flock (@ Alain Delorme)



Fish school (@ Francis Pérez)



Penguins (@ Robyn Mundy)



Wildebeest (@ Burrard-Lucas.com)

If you want to know how highly important topics such as 3D printing, robotics, programming, sensors, actuators, and swarm intelligence are packaged in a toy-like platform you should participate and enjoy programming in a fun way.

Register at office@lakeside-labs.com

Workshop:

When: 06.05.2022
9:00 – 13:00

Where. Lakeside Labs GmbH, Lakeside B04b, 9020 Klagenfurt am Wörthersee