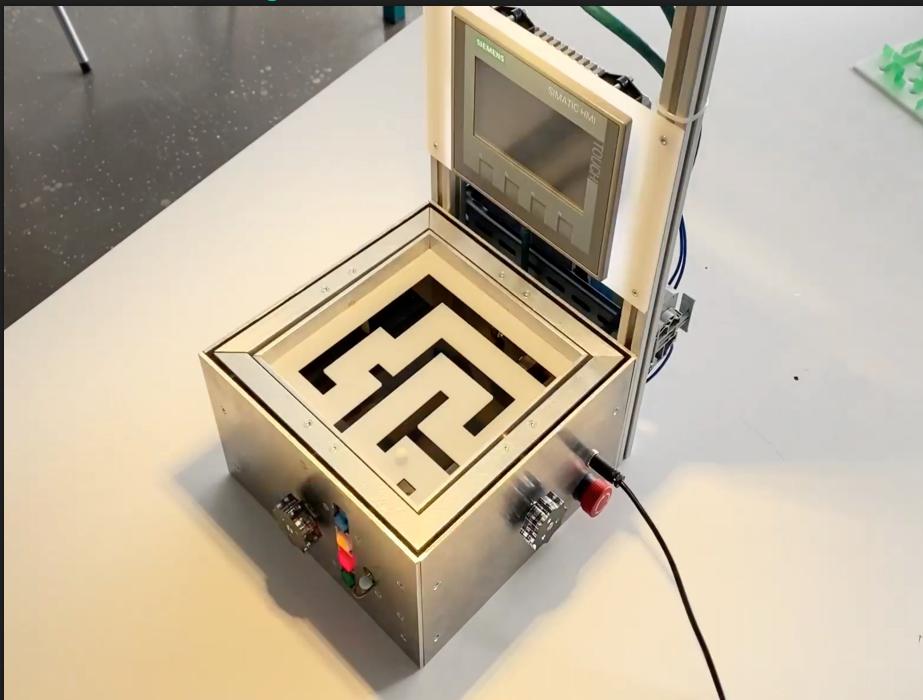


My Creations

Gilles Butikofer - 2025

Automated Ball Maze



2021

- Best automation project award
- Skills developed :
 - Design with Autodesk Inventor (CAD)
 - Electrical Diagram
 - Turning / Milling / Laser Cutting
 - Machining / Assembling / Wiring
 - Using an Cognex Industrial Camera
 - Using a Siemens SIMATIC S7-1200 Controller
 - Programming with TIA Portal

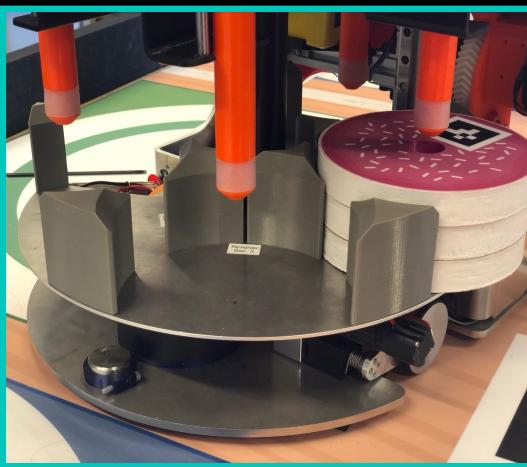
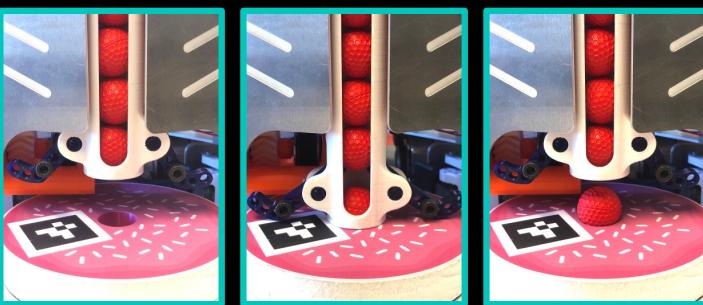
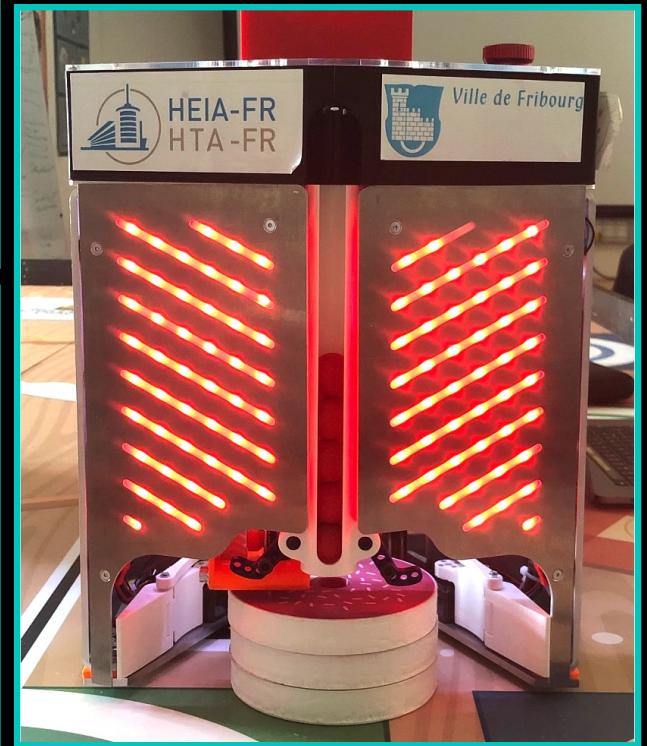
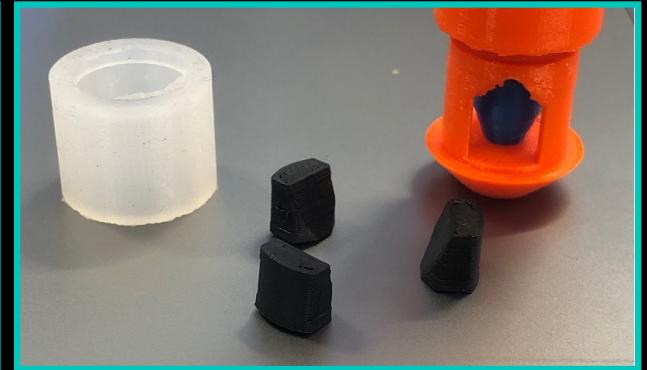
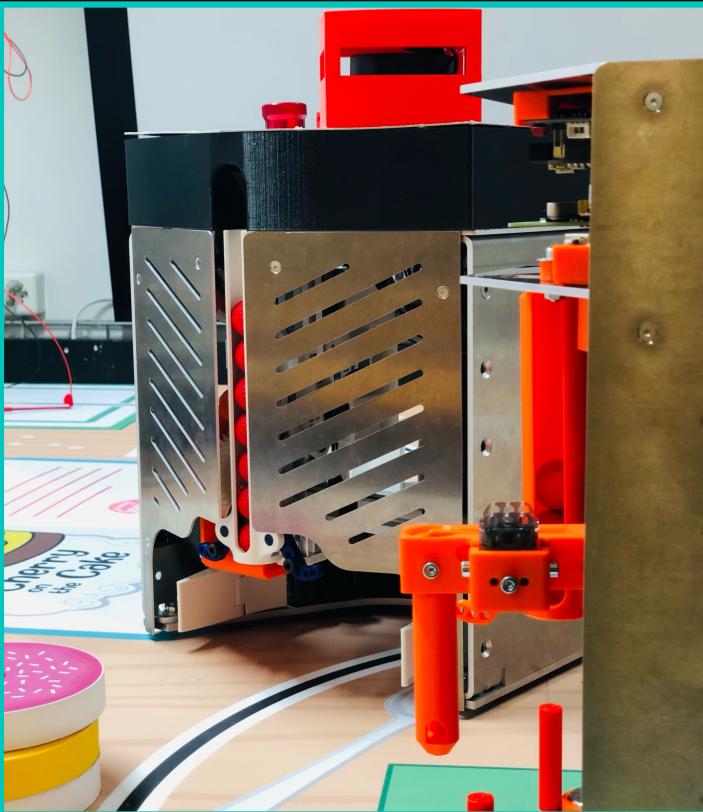
Eurobot 2023

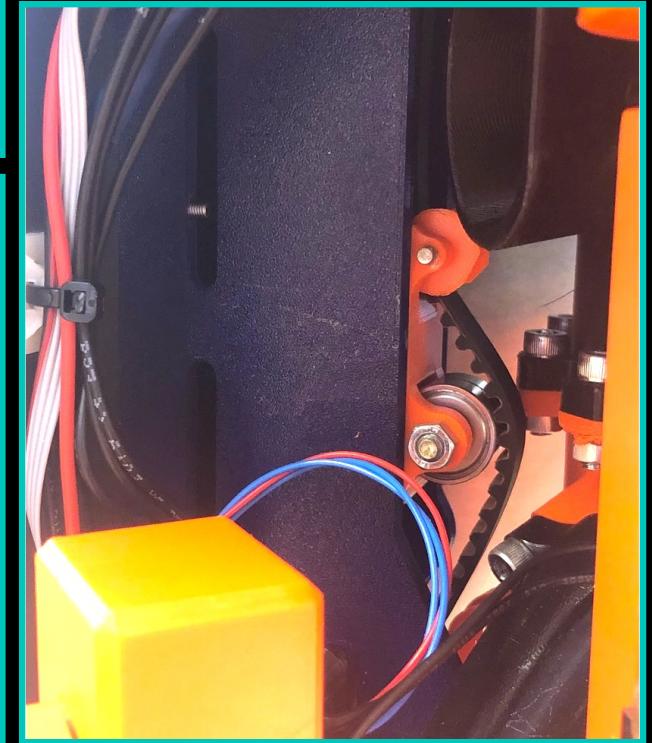
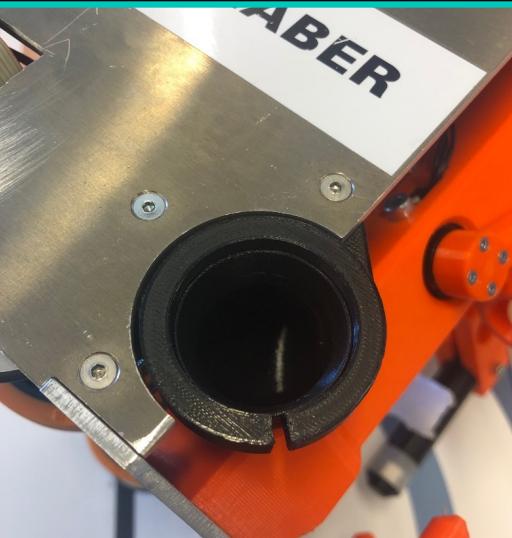
2022-2023



- Skills developed :
 - Interdisciplinary Teamwork
 - Deadlines Management
 - CAD Design with Siemens NX
 - Developing Reliable Mechanisms
 - Designing for 3D Printing & Laser Cutting
 - Assembling
 - Programming in Python







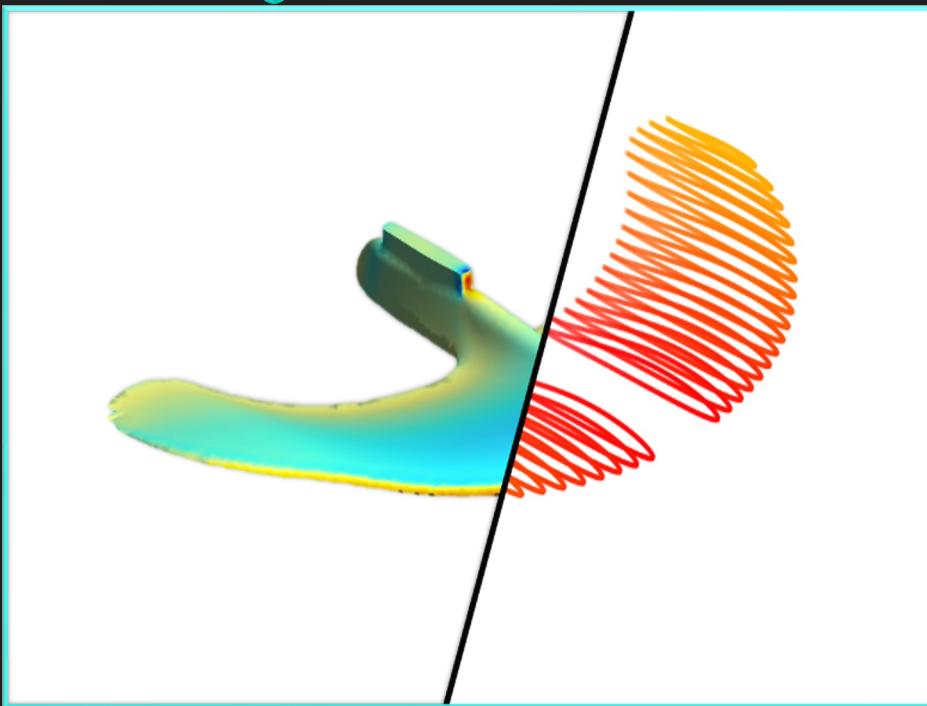
Dragon Themed Piggy Bank for Fribourg Gotteron

2023



- Skills developed :
 - Unsolicited solo project
 - Adapting a Free 3D Model
 - Design for 3D Printing
 - Electronic schematic & selecting components
 - Assembling / Wiring

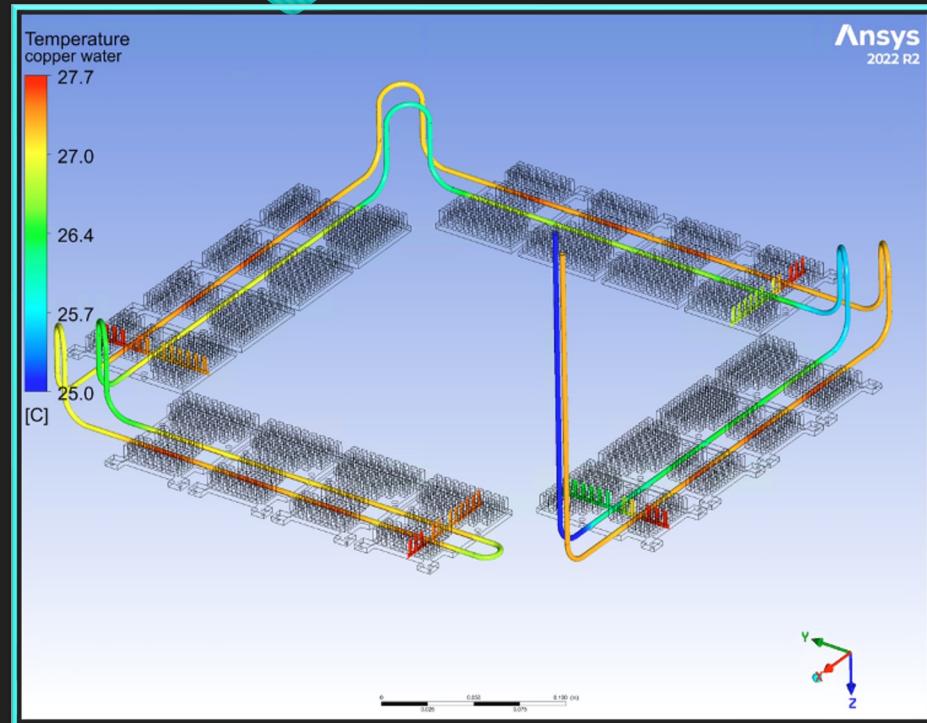
Simulating Drag and Lift of a Hydrofoil in Python



2023

- Skills developed :
 - Programming in Python
 - Calling an External Program XFOIL from python
 - Solo project
 - Writing a technical report

Water Cooling Setup for the CYGNUS 40L, a Neutrino and Dark Matter Detector

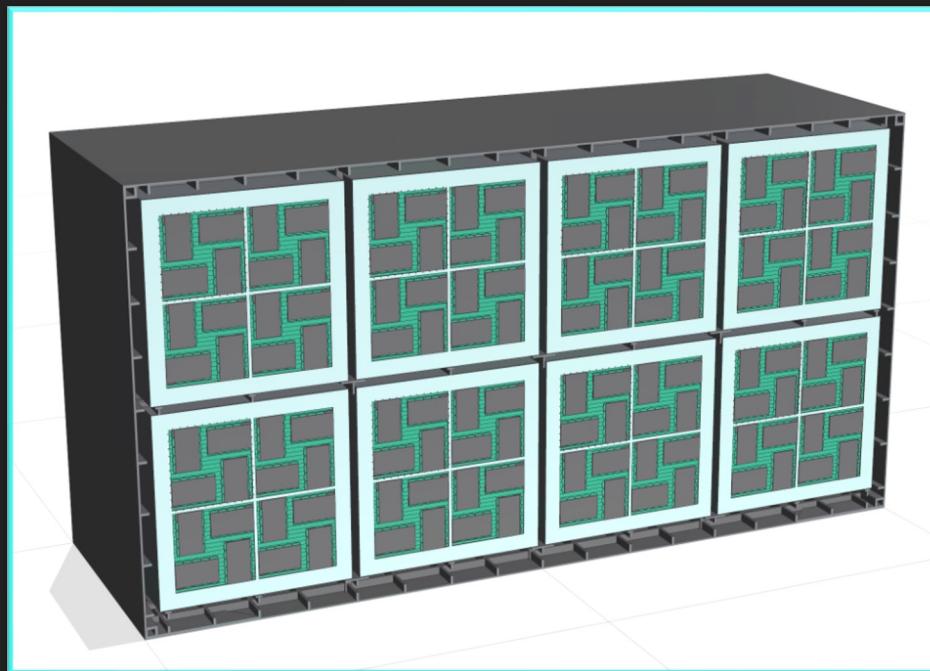


2024

- Bachelor thesis : Alumni Award
- Skills developed :
 - Thermal Simulations in Ansys Fluent 2023
 - Multitasking
 - Writing a Technical Report in English
 - Interdisciplinary teamwork

Design Proposal for a Future 12m³ Neutrinos and Dark Matter Detector

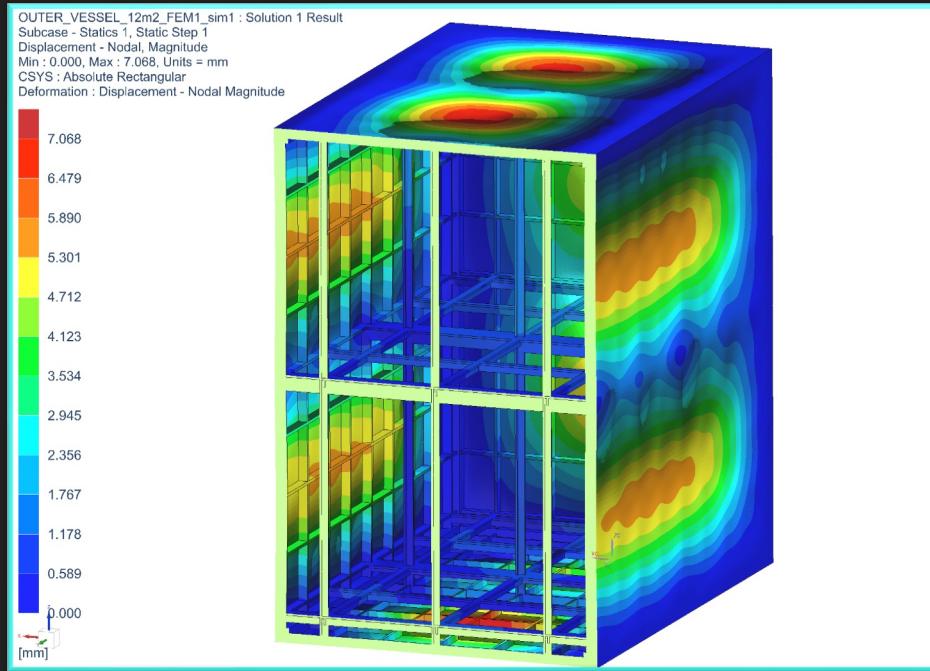
2024



- Skills developed :
 - CAD Design with Siemens NX
 - FEM Simulation with Nastran solver
 - Teamwork

Design Proposal for a Future 12m³ Neutrinos and Dark Matter Detector

2024



- Skills developed :
 - CAD Design with Siemens NX
 - FEM Simulation with Nastran solver
 - Teamwork



UNIVERSITY
of HAWAII
MĀNOA



Family project, building a house



2024-2025

- Skills developed :
 - Team management
 - Planning management
 - Outdoor manual work
 - Earthen wall construction

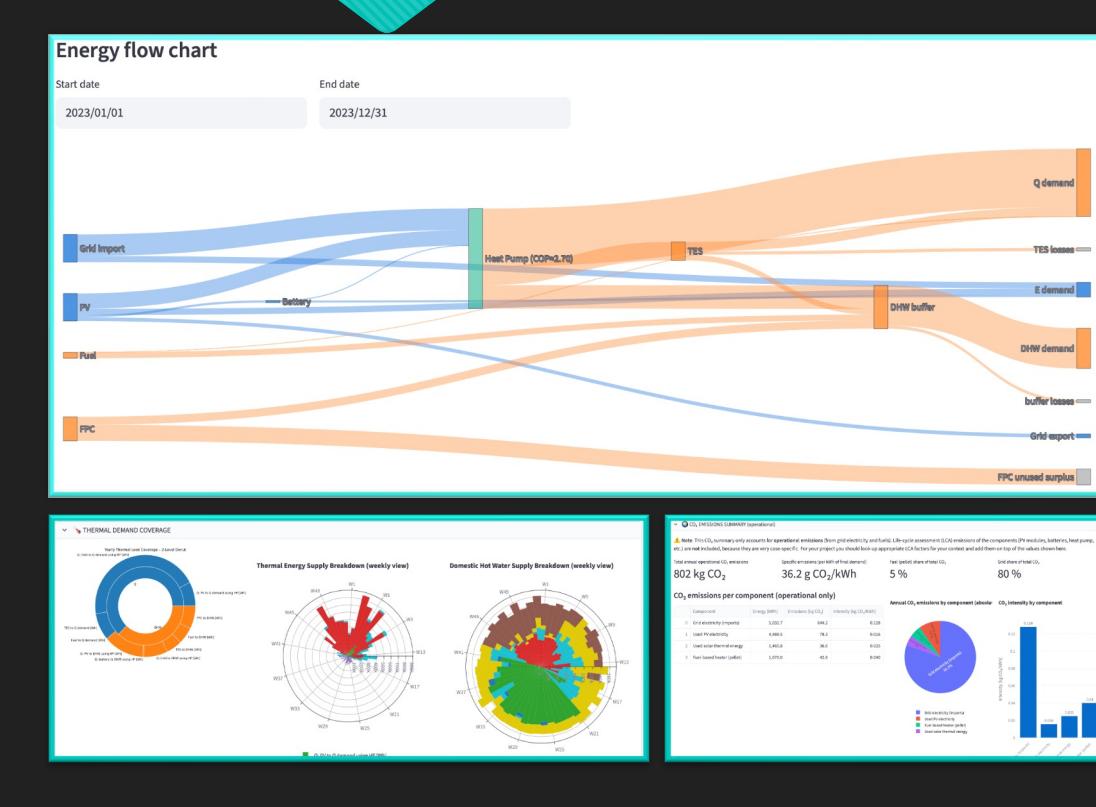
Pizza oven



2025

- Skills developed :
 - Solo personal project
 - Material Planning / ordering
 - Learning from literature
 - Outdoor manual work

Energy simulation tool



2025

- Skills developed :

- Python
- Web interface deployment
- Working with existing documents
- Github

<https://energysim.recommendertool.ch>



To be continued ...



joe marino/imago