# Eric RICHTER

Citizenship: Switzerland, Sweden

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Curious & Inquisitive
Purpose Driven
Self-Disciplined
Unyielding
Open

#### **EDUCATION**

ETHZ, Swiss Federal Institute of Technology

MSc in Mechanical Engineering. Major in robotics/control and management. GPA: 5.39 (max 6)

Lausanne, Switzerland

Zürich, Switzerland

Sept. 2022 - Present

EPFL, Swiss Federal Institute of Technology

MSc in Micro- Engineering. Major in solar technologies. GPA: 5.30 (max 6). (discontinued)

Sept. 2021 - Aug. 2022

EPFL, Swiss Federal Institute of Technology

BSc in Micro- Engineering. **GPA:** 5.23 (max 6)

Lausanne, Switzerland Sept. 2018 - June 2021

USJ, Saint-Joseph University of Beirut

Off-Curriculum Studies

Beirut, Lebanon Sept. 2017 - Dec. 2017

#### WORKING EXPERIENCE

Sensition

Stäfa, Switzerland Sept. 2023 - Present

R&D Engineering Intern
Development of a next generation high accuracy low cost humidity reference.

• Technical support for multiple humidity and temperature related projects.

EPFL

Lausanne, Switzerland

Teaching Assistant in Mathematical Analysis

Feb. 2021 - Jul. 2021

Swiss Army

Intelligence Soldier in the Air Force

Feb. 2018 - May. 2018

# ACADEMIC PROJECTS

#### Machine Learning Semester Project

ETHZ - UZH

Switzerland

Emerging Intelligent Substrates Group at the Institute for Neuro-Informatics (INI)

Mar. 2023 - Jul. 2023

• Discovery of a low-power neural architecture through evolutionary methods for solving the spiking Heidelberg digits (SHD) dataset.

## Nano-Engineering Semester Project

 $\mathrm{EPFL}$ 

Micro-Systems Laboratory

Feb. 2021 - Jun. 2022

• Design, COMSOL simulation, and iterative improvement of superconducting electromagnetic resonators for high accuracy and highly parallel temperature measurements in cryostats for quantum computers.

# Robotics Semester Project

EPFL

Mobile Robotics Lab as a part of the Hiveopolis Project

Sept. 2021 - Jan. 2022

Design, fabrication and automation of a 1D measurement system for vibrational characterization of tweaked bee combs
for human-bee communication.

#### EXTRACURRICULAR PROJECTS

# ShARE's Leadership Program

EPFL - International

Sept. 2020 - Nov. 2022

Consultant and Team Leader

- Interim Vice-Presidence (2022): Planning and organization of the 2022 Autumn Semester.
- Analyst for a start-up (2022): Second hand online clothing platforms.
- Analyst for a start-up (2021): High end tech-watches.
- Analyst for a start-up (2021): AI enhanced stethoscope for lung disease diagnosis.
- Exercise analysis (2020): The potential for renewable energies in the Lebanese energy mix.

# International Genetically Engineered Machine Competition (IGEM)

EPFL

Head Engineer and Laboratory Technician

- Feb. 2021 Nov. 2021
- Project: project selection, definition, literature review, and planning of experimental and technical tasks.
- Communication: stakeholder interviews, Sensitization of school children, production of a podcast (Spotify link here).
- Technical: design, prototyping, and testing of a raspberryPi controlled bioreactor for continuous treatment of water. Laboratory support for biological and chemical procedures and experiments.

# TECHNICAL SKILLS

#### Software

• Programming Languages: Python, C/C++, Matlab, Arduino, SQL, VHDL, HTML/CSS, Javascript, C#, Java

• CAD: Autodesk Fusion 360, Catia V5

• FEM: COMSOL

PCB design: LibrePCBVersion Control: Git

## Research

• DOE: Design of Experiments

#### Laboratory Experience

• Clean room experience, Synbio laboratory experience, chemistry laboratory experience

# **LEADERSHIP**

# Vice-Presidence for EPFL at ShARE's Leadership Programme

**EPFL** 

• Planning and organizing the local association with respect to the University and business partners

# Team Leader at ShARE's Leadership Programme

EPFL

• Training of the next generation of "do well do good" ShARE EPFL consultants

#### **Event Organizer**

ETHZ - EMC2

• Planning and organization of events for students in the Masters of energy systems and technologies program

# **LANGUAGES**

English (Native), French (Native), German (B2), Swedish (Spoken B1), interest in Levantine Arabic (A2), and Italian (A1)

# **Personal Interests**

Sports: Skiing/Snowboarding, Bouldering, Tennis, Ice Hockey

Music: Formally trained as a pianist, informally playing any other instrument I can get my hands on

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