# ERIC RICHTER

Citizenship: Switzerland, Sweden

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#### SUMMARY

My career goal is to bring a genuine contribution to the world. While I do that, I'll push to tackle the hardest challenges, to grow to my limit, and to stay true to my values of kindness, curiosity, positivity, creativity, and high quality.

#### **EDUCATION**

BU, Boston University

Boston MA, USA

Research Scholar

Sep. 2024 - Feb 2025 (Expected)

ETHZ, Swiss Federal Institute of Technology MSc in Mechanical Engineering GPA: 5.39 (max 6)

Zürich, Switzerland

Sep. 2022 - Mar 2025 (Expected)

EPFL, Swiss Federal Institute of Technology

MSc in Micro- Engineering GPA: 5.30 (max 6) (discontinued)

Lausanne, Switzerland Sep. 2021 - Aug. 2022

EPFL, Swiss Federal Institute of Technology

Lausanne, Switzerland

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

Sep. 2018 - Jun 2021

USJ, Saint-Joseph University of Beirut

Beirut, Lebanon

Off-Curriculum Studies

Sep. 2017 - Dec. 2017

CESS, Gymnase de Nyon (High-School)

Specialization in Physics and Music GPA: 5.49 (max 6)

Nyon (VD), Switzerland Sep. 2014 - Jul. 2017

- Prize of best student in Physics
- Prize of best student in Biology

# WORKING EXPERIENCE

Sensirion Stäfa, Switzerland

 $R \& D \ Engineering \ Intern$ 

Sep. 2023 - Present

- Main Task: Proof of concept of a next generation humidity reference.
- Results: State of the art accuracy achieved with 1/100th price.

EPFL Lausanne, Switzerland

 $Teaching\ Assistant\ in\ Mathematical\ Analysis$ 

Feb. 2021 - Jul. 2021

Swiss Army Intelligence Soldier in the Air Force Switzerland Feb. 2018 - May. 2018

#### ACADEMIC PROJECTS

# Mass Transport Master's Thesis

ETHZ - BU

Lubner Group

Sep. 2024 - Feb. 2025

- Task: Understanding mass transport phenomena through numerical models.
- Results: Ongoing

# Machine Learning Semester Project

ETHZ - UZH

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

Mar. 2023 - Jul. 2023

- Task: Discovery of a low-power neural architecture through evolutionary methods for solving the spiking Heidelberg digits (SHD) dataset.
- Results: Evolutionary method proven ineffective for this task.

# Nano-Engineering Semester Project

**EPFL** 

Micro-Systems Laboratory

Feb. 2021 - Jun. 2022

- Task: Design, COMSOL simulation, and iterative improvement of superconducting electromagnetic resonators for high accuracy and highly parallel temperature measurements in cryostats for quantum computers.
- Results: Scientific paper abstract is submitted for presentation at CERN.

# Robotics Semester Project

EPFL

Mobile Robotics Lab as a part of the Hiveopolis Project

Sep. 2021 - Jan. 2022

- Task: Design, fabrication and automation of a 1D measurement system for vibrational characterization of tweaked bee combs for human-bee communication.
- Results: Working and automated measurement system submitted and built upon.

# EXTRACURRICULAR PROJECTS

#### ShARE's Leadership Program

EPFL - International

Consultant and Team Leader

Sep. 2020 - Nov. 2022

- $\bullet$  Interim Vice-Presidence (2022): Planning and organization of the 2022 Autumn Semester.
- Consultant for a start-up in Online Shopping (2022): Second hand online clothing platforms.
- Consultant for a start-up in Luxury (2021): High-end tech-watches.
- Consultant for a start-up in Medical Devices (2021): AI enhanced stethoscope for lung disease diagnosis.

# International Genetically Engineered Machine Competition (IGEM)

EPFL

Head Engineer and Laboratory Technician

Feb. 2021 - Nov. 2021

- Description: design and synthesis of a yeast cell capable of filtering copper from water for depollution of the soils in vineyards.
- 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 bioreactor for continuous treatment of water. Laboratory support for biological and chemical procedures and experiments.
- Results: Gold medal, prize for best website, nomination for best project in the environmental category.

# **LEADERSHIP**

#### Event Organizer for the Energy Students Student Committee (EMC2)

ETHZ - EMC2

• Main Task: Organization and hosting of a panel discussion between experts on carbon pricing policies in Europe and in Switzerland and their alternatives.

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

EPFL

 $Vice ext{-}President$ 

• Task: Planning and organizing the local association with respect to the university and business partners.

• Results: Secured a set of start-ups and teams to work on consulting projects. Set-up training plan for mentors to new arrivals in the association.

# Team Leader at ShARE's Leadership Programme

EPFL

Mentor

Sep. 2021 - Dec. 2021

Mar. 2022 - Dec. 2022

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

# **LANGUAGES**

English (Native), French (Native), German (B2-C1), Swedish (B1), Italian (A2), Levantine Arabic (A1)

# PERSONAL INTERESTS

**Sports**: Mountain Sports, Water Sports, Bouldering, Tennis, Ice Hockey.

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