

ERIC RICHTER

Citizenship: Switzerland, Sweden
Address: Route de Founex 16 | 1296 Coppet | Switzerland
Email: ercoppet3@gmail.com | Telephone: +41 78 686 55 30 |  LinkedIn | [Link to Supporting Documents](#)

SUMMARY

I’m a rounded engineer and knowledge capitalist. What I do must have a sustainable impact. What counts most is the team I do it with though and that I keep on growing! I’ll rise up to any challenge as long as the people I’m working with share my kindness, curiosity, positivity, creativity, and striving for high quality.

EDUCATION

BU, Boston University <i>Visiting Research Scholar</i>	Boston MA, USA <i>Sep. 2024 - Feb 2025 (Expected)</i>
ETHZ, Swiss Federal Institute of Technology <i>MSc in Mechanical Engineering GPA: 5.39 (max 6)</i>	Zürich, Switzerland <i>Sep. 2022 - Mar 2025 (Expected)</i>
EPFL, Swiss Federal Institute of Technology <i>MSc in Micro- Engineering GPA: 5.30 (max 6) (discontinued)</i>	Lausanne, Switzerland <i>Sep. 2021 - Aug. 2022</i>
EPFL, Swiss Federal Institute of Technology <i>BSc in Micro- Engineering GPA: 5.23 (max 6)</i>	Lausanne, Switzerland <i>Sep. 2018 - Jun 2021</i>
USJ, Saint-Joseph University of Beirut <i>Off-Curriculum Studies</i>	Beirut, Lebanon <i>Sep. 2017 - Dec. 2017</i>
CESS, Gymnase de Nyon (High-School) <i>Specialization in Physics and Music GPA: 5.49 (max 6)</i> <ul style="list-style-type: none">• Prize of best student in Physics• Prize of best student in Biology	Nyon (VD), Switzerland <i>Sep. 2014 - Jul. 2017</i>

WORKING EXPERIENCE

Sensirion <i>R&D Engineering Intern</i> <ul style="list-style-type: none">• Main Task: Proof of concept of a next generation humidity reference.• Results: State of the art accuracy achieved with 1/100th price.	Stäfa, Switzerland <i>Sep. 2023 - Feb. 2024</i>
EPFL <i>Teaching Assistant in Mathematical Analysis</i>	Lausanne, Switzerland <i>Feb. 2021 - Jul. 2021</i>
Swiss Army <i>Intelligence Soldier in the Air Force</i>	Switzerland <i>Feb. 2018 - May. 2018</i>

ACADEMIC PROJECTS

Master’s Thesis on the Theme of Mass Transport in Solid Sorbent <i>Lubner Group in the MSE Departement of Boston University</i> <ul style="list-style-type: none">• Task: Understanding a toy numerical model, its insights and its limitations.• Methods: Explicit numerical simulation of the diffusion-reaction equation based on Fick’s diffusion and Langmuir reaction kinetics.• Results: The numerical method used and physical model chosen, although intuitive, are computationally intensive and not separable enough to be more relevant than easily computed semi-empirical models.	ETHZ - BU <i>Sep. 2024 - Feb. 2025</i>
Machine Learning Semester Project <i>Emerging Intelligent Substrates Group at the Institute for Neuro-Informatics (INI)</i> <ul style="list-style-type: none">• Task: Discovery of a low-power neural architecture through evolutionary methods for solving the spiking Heidelberg digits (SHD) dataset.• Methods: Genetic algorithm applied to nodes, connections, and delays of a sparsely connected boltzmann machine to obtain scale-free-like solution networks .• Results: Evolutionary method proven ineffective for this task.	ETHZ - UZH <i>Mar. 2023 - Jul. 2023</i>

Nano-Engineering Semester Project

EPFL

Micro-Systems Laboratory

Feb. 2021 - Jun. 2022

- Task: Design of a superconducting electromagnetic S-shaped resonators for high accuracy resonance frequency based parallelized temperature measurements in cryostats for quantum computing applications.
- Methods: COMSOL electromagnetic simulations toolbox.
- 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.
- Methods: 3D printing, machining and mounting of a screw based linear displacement actuator. RPi controlled stepper motor programmed with trapezoidal acceleration profiles. Vibrational data collected with a laser doppler vibrometer.
- Results: Working automated measurement system submitted and built upon.

EXTRACURRICULAR PROJECTS

ShARE's Leadership Program

EPFL - International

Consultant and Team Leader

Sep. 2020 - Nov. 2022

- 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-President

Mar. 2022 - Dec. 2022

- 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

- 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.

I authorize the treatment of my personal data according to GDPR (EU) 2016/679