

Samuel Gaucher

Physicist & Data Scientist

Accomplished scientist with 6+ years of experience leading R&D projects aimed at solving the scaling challenges of the semiconductor industry. Demonstrated experience solving complex problems using ML, handling large datasets with Python. Goal-oriented mindset with outstanding teamwork skills, ideal to develop and maintain professional relationships in fast-paced environments.



CONTACT DETAILS

Email

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Website

https://gaucher.io

PROFESSIONAL SKILLS

Python



TensorFlow/Keras



Computer Vision



MATLAB



HTML/JS/CSS



Raspberry Pi



Sensors



Communication



Leadership



Entrepreneurship



EXPERTISE

Data Visualization



Machine Learning



Nanotechnologies

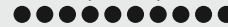


Quantum Information



LANGUAGES

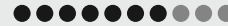
French (native)



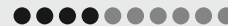
English



German



Italian



PROFESSIONAL EXPERIENCE

2016 - 2019
3.5 years

EXPERIMENTAL PHYSICIST

Paul-Drude-Institut für Festkörperelektronik (PDI)

- » Successfully managed a research project in quantum nanoelectronics.
- » Analyzed large and complex datasets using Python code.
- » Implemented data engineering solutions to conduct scientific experiments.
- » Obtained groundbreaking results leading to 1 patent, 4 publications.
- » Communicated results to audience in 8+ international conferences.

2014 - 2015
2 years

EXPERIMENTAL PHYSICIST

McGill University

- » Developed nanofabrication methods to access new exotic physics.
- » Established building blocks for a new type of quantum bit.
- » Collaborated to code a Python instrument interface for data collection, saving more than 1000€/year in proprietary license fees.
- » Contributed to results compiled in 1 scientific publication.

2014 - 2015
2 years

TEACHING ASSISTANT

McGill University

- » Perfected mentoring skills by instructing 200+ undergraduate students, teaching 4 courses.
- » Responsible to evaluate and grade academic work in physics.
- » Promoted academic success by giving constructive feedback.

2008 - 2020
12 years

MUSICIAN (Violin, Piano)

Self-employed

- » Trained in classical and jazz music.
- » Performed with 3 ensembles in 100+ concerts and paid gigs.
- » Recorded 2 albums.
- » Taught 25+ students.

EDUCATION

2016 - 2021

Dr. rer. nat., PHYSICS

Humboldt Universität, Berlin (defence expected Winter 2020-21)

2014 - 2015

M.Sc., PHYSICS

McGill University, Montreal

2010 - 2013

B.Sc., major PHYSICS, minor PHILOSOPHY

McGill University, Montreal

ACTIVITIES

- » Spokesperson of the graduate students at PDI (2017-2019)
- » Volunteer for the Falling Walls Foundation during the Berlin Science Week (2019)
- » Young Entrepreneurs in Science Workshop in Leipzig (2019)
- » NSERC-CREATE Training Program in Integrated Sensor Systems (2015)
- » Organizing member of the Physics Games at McGill University (2015)
- » High-school student representative/student body president (2001-2010)