

# Dr. Samuel Gaucher

## Consultant | Physicist | Data Scientist

Researcher with 6+ years of experience in nanotechnologies and quantum materials, 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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**Mobile**

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**LinkedIn**

linkedin.com/in/samuelgaucher

**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

05.2021 -  
0 years

**RISK MANAGEMENT CONSULTANT**

Ernst & Young

- » Risk Management
- » Mathematical modeling

02.2016 - 11.2019  
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.
- » Obtained groundbreaking results leading to 1 patent, 4 publications.
- » Communicated results to audience in 8+ international conferences.

01.2014 - 12.2015  
2 years

**EXPERIMENTAL PHYSICIST**

McGill University

- » Developed novel nanofabrication methods to access exotic physics.
- » Established building blocks for a new type of quantum bit.
- » Contributed to results compiled in 1 scientific publication.

01.2014 - 12.2015  
2 years

**TEACHING ASSISTANT**

McGill University

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

2007 - 2021  
14 years

**MUSICIAN (Violin, Piano)**

Self-employed

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

## EDUCATION

04.2016 - 03.2021

**Dr. rer. nat., PHYSICS (*magna cum laude*)**

Humboldt Universität, Berlin

01.2014 - 12.2015

**M.Sc. , PHYSICS**

McGill University, Montreal

09.2010 - 12.2013

**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)