




# PHILIPP GYSEL

## RESEARCHER AND SOFTWARE DEVELOPER

*Dedicated researcher and software developer with 6+ years of industry experience. Proven contributions in both corporate and academic research in the areas of machine learning, cyber security, and efficient edge computing.*

### PERSONAL INFORMATION

---

✉ gyselph@gmail.com       [www.linkedin.com/in/pgysel](http://www.linkedin.com/in/pgysel)  
 [scholar.google.com/citations?user=P1fueTAAAAAJ](https://scholar.google.com/citations?user=P1fueTAAAAAJ)       Bern, Switzerland

### WORK EXPERIENCE

---

- 08/2022 – now  
Switzerland      **Researcher at Acronis International GmbH**  
Develop behavior-based malware detection using machine learning
- Responsible for the complete ML process: data gathering, feature extraction, machine learning model implementation.
  - Co-author of 5 submitted patents and 1 conference paper.
  - Skills: literature review, help advice ML projects, cloud data pipelines, sequence models like transformers, Python, TensorFlow.
- 06/2020 – 11/2021  
Switzerland      **Software Engineer at Intersys AG**  
Development and maintenance of enterprise applications
- Skills: unsupervised ML models for time series classification, Java + SpringBoot, Linux, draft technical offers.
- 02/2018 – 01/2020  
Switzerland      **Software Engineer at Elca Informatique SA**  
Development of new enterprise applications
- Skills: Cloud deployments with Kubernetes / OpenShift, software architecture, code reviews, CI/CD pipelines.
- 09/2016 – 09/2017  
San Diego, CA      **Software Engineer at Qualcomm Research**  
Neural network compression for inference on Qualcomm Snapdragon SoC
- Successful Quantization of the largest CNNs to 8-bit fixed point at negligible accuracy loss.

### EDUCATION

---

- 09/2014 – 06/2016  
Davis, CA      **MSc in Electrical and Computer Engineering at University of California, Davis**  
Research in neural network compression and efficient inference on edge devices
- GPA: 4.0 / 4.0.
  - Master thesis: Ristretto, an open-source tool for neural network quantization.
- 09/2009 – 08/2012  
Switzerland      **BSc in Electrical Engineering at Bern University of Applied Sciences**  
Finish in top 8% of class

### PUBLICATIONS, COURSES, VOLUNTEERING WORK

---

- 2021 – 2022  
Switzerland      **CAS Certificate in Data Science**  
Continuing education at University FHNW with focus on data analysis and ML.
- 2020 – 2021  
Switzerland      **Volunteering at Powercoders**  
Help refugees to gain software developer skills and find a software engineering job.
- 2015 – 2016  
Davis, CA      **Open-source project Ristretto**  
Quantization of deep neural networks. This research was cited by companies including Qualcomm, Intel, Samsung, and Microsoft.