GIOVANNI RIZZI

giovanni.m.rizzi@gmail.com +45 5014 7157 +1 (408) 621-0755 www.linkedin.com/in/giovanni-rizzi-91594a95/

Physics engineer looking for opportunities in Data Science

- Talented **engineer** with outstanding **international research experience**.
- **Analytically** driven with solid **statistical** and **data science** skills.
- Research experience in **biomedical devices for diagnostics**.
- **Team player**, organized international collaborators to **achieve ambitious goals.**
- **Self-motivated** and striving for **continuous improvement.** Willing to tackle new challenges.

TECHNICAL SKILLS: **Data science**, machine learning, deep learning, statistics, bioinformatics, Matlab, R, Python, Origin, SQL. **Microfabrication and electronics**, clean room fabrication and characterization of magnetic sensos. **Sensor integration and measurements** (expecially optical and magnetic), PCB design, microcontroller programming, firmware and data acquisition (Labview, C++, assembly). **Scientific writing and reporting.**

SKILLS: **International collaboration**, assembling and organizing multidisciplinary teams, managing communication, resolving conflicts. **Student mentorship**, setting goals, quantifiable objectives, timelines and milestones, supporting personal ambitions and development. **Funding**, project design, grant application, management of research funds, reporting results. **Intellectual property**, patent application, IP searches.

ACHIEVEMENTS

- **Published 20+ peer-reviewed papers** (h-index 8)
- **Two patent applications**
- **Granted 2.207.941 dkk** for individual postdoc by the Danish Council for Independent Research

---

EXPERIENCE

08/2017-08/2018 **PostDoc, Stanford University, Stanford, CA (P.I.: Prof. Shan X. Wang)**

- **Developed** bio-assays for cancer diagnostics and genetic expression
- **Started** DNA detection efforts in the Wang lab
- **Applied** for two patents (in review)
- **Developed** data collection software (Labview), temperature control electronics and data analysis pipeline (Matlab)

04/2014-07/2017 **PostDoc , Technical University of Denmark (DTU) (P.I.: Prof. M.F. Hansen)**

- **Granted** Individual postdoctoral grant (DFF-4005-00116), Danish Council for Independent Research
- **Lead** collaboration with Danish Cancer Society and Stanford University
- **Developed** magnetoresistive sensor platform for DNA methylation detection
- **Data analysis** of multiple experiments, > 100Mb of raw sensor data corrected for temperature and analysed to obtain genetic and epigenetic information
- **Collaboration** with BluSense Diagnostics to build measurement setups for optical detection for DNA molecular diagnostics and design data acquisition hardware and software (Labview)

01/2011-04/2014 **PhD, Technical University of Denmark (DTU) (P.I.: Prof. M.F. Hansen)**

- **Granted** DTU Nanotech PhD scholarship
- **Microfabrication and characterization** of magnetoresistive sensors in cleanroom, **sensor integration**
- **Modelling of magnetic sensors**, simulations in Matlab

EDUCATION

10/2018 **Data science**

- **Machine Learning** (Stanford University, Coursera)
- **Deep Learning** (deeplearning.ai, Coursera)

01/2011-04/2014 **PhD, Technical University of Denmark (DTU), Denmark**

09/2008-12/2010 **MSc Degree in Physics Engineering, Politecnico di Milano, Italy**

PERSONAL INTERESTS Rock climbing, backcountry skiing (avalanche safety AIARE2), electronics and robotics (microcontrollers), machining, wood working, astronomy (and telescope building), photography and video making.