

Inga Strümke

Curriculum Vitae

Norway

+47 957 30 153

inga@strumke.com



Work Experience

- February 2022 — present **Scientific Researcher**, *Norwegian Open AI Lab, NTNU*, Trondheim, Norway.
Research focus on Explainable Artificial Intelligence.
Master and PhD student supervision, and lecturing.
- May 2021 — present **Adjunct Research Scientist**, *Simula Metropolitan Center for Digital Engineering*, Oslo, Norway.
Research focus on Explainable Artificial Intelligence, and Artificial Intelligence in medical applications.
PhD student supervision.
- May 2021 — February 2022 **Postdoctoral Researcher**, *Department of Engineering Cybernetics, NTNU*, Trondheim, Norway.
Research focus on Explainable Artificial Intelligence in robotics.
Master and PhD student supervision.
- April 2020 — May 2021 **Postdoctoral Researcher**, *Simula Metropolitan Center for Digital Engineering*, Oslo, Norway.
Research focus on Explainable Artificial Intelligence and Artificial Intelligence in medical applications.
Master and PhD student supervision.
- May 2019 — April 2020 **Manager Responsible AI**, *PricewaterhouseCoopers*, Oslo, Norway.
Statistical analyses and machine learning for industry applications. Programming in Python, Julia and R.
Development of auditory framework for responsible AI.
- May 2015 — May 2019 **PhD Candidate in theoretical Particle Physics**, *University of Bergen*, Norway.
Beyond Standard Model theory and phenomenology: Supersymmetry, Two-Higgs doublet models and different particle Dark Matter scenarios.
Applied statistical methods and machine learning techniques on different types of data.
Maximum likelihood fits, density estimation, deep neural networks, boosted decision trees.
Used Tensorflow, Keras, MultiNEST etc. Programming mainly in Python and bash.
- August 2012 — May 2015 **Petrophysicist**, *Statoil ASA*, Bergen, Norway.
Well planning, evaluation and reporting on Troll oil field. Lithology and Fluid Phase prediction analyses. Duty engineer in Cased Hole Logging group, evaluating well stability with respect to drilling and P&A.
Reporting internally and externally according to the requirements from the Norwegian Ministry of Petroleum and Energy.
Collaborated internationally, using Norwegian, English and German as working languages.

Teaching

- 2022 **Lecturing and student guidance**, *Norwegian University of Science and Technology*.
TTK4853 Artificial Intelligence has an explanatory problem
- 2015 – 2017 **Lecturing and student guidance**, *University of Bergen*.
PHYS203 Relativistic Quantum Mechanics and Field Theory
PHYS118 Introduction to Special Relativity and Quantum Physics
PHYS115 Quantum Physics and Statistical Mechanics
Guided students on field trip to CERN, Switzerland.
- Fall semester 2010 **English Classes**, *UV Language Policy Service*, Valencia, Spain.
Conversation group leader for groups consisting of 10-20 Spanish speaking students with an advanced level (C1) in English.
Prepared and held activities and lectures, aiming at creating a friendly and inspiring learning environment.
- Fall semester 2009 **Lecturing and lab work**, *NTNU*, Trondheim.
TFY4160 Wave Physics

Public speaking

- 2017 — present **Worldwide**.
More than 60 presentations in different languages, including a TEDx talk in 2019, and keynote presentations on various continents.
For an updated list of selected talks, please visit strumke.github.io

IT

- August 2009 — June 2012 **NTNU Abuse Response Team**, *NTNU IT*, Trondheim.
Internet and data security with responsibility for students and employees at the university and student housings.
- October 2008 — June 2012 **IT Support**, *NTNU IT*, Trondheim.
General IT support for students and employees at the NTNU.
Interaction face to face, telephonic and e-mail.

Miscellaneous

- 2017, 2018 **External Examiner**, *Bergen University College, Faculty of Engineering*.
DAT106 Fysikk og kjemi for data
MAS112 Dynamikk
MAT152 Videregående matematikk og fysikk for data og elektro
- February 2017 **Consultant**, *Competition 'Unge Forskere' for Norwegian high school students*.
Evaluated student project discussing muon decay

Education

- 2010 — 2012 **Master of Science in theoretical physics**, *NTNU*, Trondheim, Norway.
[Field Theory at finite Temperature and Density: Applications to Quark Stars](#)
Supervisor professor Jens Oluf Andersen.
One semester at the University of Valencia, all lectures in Spanish
Additional courses in mathematics, statistics and Artificial Intelligence programming.
Used C++, FORTRAN, Java, Lisp and Python.
Grade: A
- 2007 — 2010 **Bachelor in physics**, *NTNU*, Trondheim, Norway.