Curriculum Vitae Jonathan Scott

CONTACT Information

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 $+43\ 67764005086$ 

EDUCATION

# Institute of Science and Technology Austria

Sep 2020-Present

- Machine Learning PhD Student, since February 2022 affiliated with Professor Christoph Lampert.
- Research Interests: federated learning, semi-supervised learning, privacy.

#### University of Cambridge, UK

Oct 2017-Jul 2018

• Master's in Pure Mathematics.

# University of Edinburgh, UK

Sep 2013-Jun 2017

• First Class B.Sc. in Mathematics (ranked 1/120).

Papers

**Jonathan Scott**, Hossein Zakerinia, Christoph H. Lampert. "PeFLL: Personalized Federated Learning by Learning to Learn" (Accepted ICLR 2024) https://arxiv.org/pdf/2306.05515.pdf

Jonathan Scott, Michelle Yeo, Christoph H. Lampert. "FedProp: Cross-client Label Propagation for Federated Semi-supervised Learning" (Published TMLR Oct 2023) https://openreview.net/pdf?id=gY04GX8R5k

EXPERIENCE

### Apple Research Internship

May 2023 - Sep 2023

• Research intern with the Private Federated Learning team in Cambridge, UK.

### IST Austria Teaching Assistantship

Oct 2022 - Jan 2023

• Teaching assistant for the Modern Machine Learning course, responsible for class of approximately 20 students

### IST Austria Research Internship

Jan 2020 - Sep 2020

• Applied topological data analysis to interpret neural network outputs.

# **DHL** Consulting Internship

 $Aug\ 2019-Oct\ 2019$ 

- Management consulting internship, delivering DHL wide Internal Control System.
- Working with software engineering team to build an online reporting dashboard.

INVITED TALKS

Federated Learning Seminar at Owkin, Paris

Nov 2022

# VOLUNTEERING

### KI Macht Schule

**2021** – **Present** 

- Outreach organisation focused on communicating artificial intelligence concepts
- Prepared and presented day long workshops on machine learning and artificial intelligence to high school students in Vienna

### University of Edinburgh Maths Outreach team

2013 - 2017

- Organised public lectures, masterclasses and events in Edinburgh Science Festival.
- Received the Edinburgh Award in 2016 for my work with the Outreach Team.

# Academic Awards

### Napier Medal and Gangadhar Balwant Gadgil Prize

2017

• Awarded to the best final year student in Mathematics from the University of Edinburgh.

Arthur Erdélyi Prize
William & Isabella Dick Prize
George Williamson Memorial Prize

2016 2015

2014

• Awarded, respectively, on the basis of distinguished performance in Year 3, Year 2 and Year 1 Mathematics Examinations at the University of Edinburgh.

#### SCHOLARSHIPS

#### Newton College Masters Award

2017-2018

• Awarded £12,000 on the basis of academic merit to study for the MASt. in Pure Mathematics at the University of Cambridge.

#### William Manson Vacation Scholarship

2014

• Awarded funding to carry out a summer research project titled "Quasi Smoothness of Curves in Weighted Projective 3-Spaces" with Professor Ivan Cheltsov.

### SCHOOLS ATTENDED

## Summer School on Privacy-Preserving Machine Learning

Aug 2022

Topics included Federated Learning, cryptography and Differential Privacy. Hosted by TU Copenhagen and Aarhus University.

#### **ELLIS Cambridge Machine Learning Summer School**

Jul 2022

General ML focused school hosted by Cambridge University.

### The Machine Learning Summer School (MLSS)

Jun 2020

Summer school hosted by Max Planck Institute for Intelligent Systems, Tübingen.

### Skills

# Programming

Advanced Python (PyTorch, Tensorflow, Keras, scikit-learn, scipy), Git, Latex.

#### Languages

Native English, Fluent German, Intermediate French, Intermediate Polish.

#### Interests

#### Chess

Scottish junior national team, competed in World and Euro Youth Championships.

### Badminton

Competing in third Austrian National League. Previously at Cambridge University 1st Team in the top tier of UK university divisions. Training 2-3 times per week.