

NIKOLA HRISTOV KONSTANTINOV

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EDUCATION

- 2017 – Present **Institute of Science and Technology Austria: PhD Candidate**
- Supervisor: Prof. Christoph H. Lampert
- Main research interest: Trustworthy Machine Learning
- 2013 – 2017 **University of Oxford: Master in Mathematics and Statistics, Grade: 1.1**
- Master Thesis: “Kernel Dependence Measures for Unsupervised Learning”
 with supervisor Prof. Dino Sejdinovic
- First-class score in all four years completed
- Jesus College Davies Prize for performance in Final Examinations 2017
- Department of Statistics Prize for FHS Mathematics and Statistics Part A 2015
- Open Scholarship from Jesus College, Oxford – in 3 consecutive years
- 2005 – 2013 **Sofia High School of Mathematics**
- Bulgarian High School Diploma with a score of 5.99 out of 6
- Extracurricular classes in Mathematics, Informatics and English

WORK EXPERIENCE

- Summer of 2019 **Amazon.com, Inc., Berlin, Germany: 3 months**
- Group: Intelligent Cloud Control; Mentor: Paul Vazquez
- Developing methods for evaluation and model comparison of algorithms used
 for auto scaling in cloud computing
- Summer of 2016 **ATASS Sports, Exeter, UK: 7 weeks**
- Research on statistical modelling for sports prediction
- Experience in statistical programming with R and manipulating large datasets
- Summer of 2015 **Institute of Science and Technology Austria: 11 weeks**
- Supervisor: Prof. Nick Barton
- Research in mathematical models of evolution: quantifying the effects of
 various genetic phenomena on spatially extended populations

PUBLICATIONS AND PREPRINTS

- 2020 **Nikola Konstantinov**, Elias Frantar, Dan Alistarh, Christoph H. Lampert: On
 the Sample Complexity of Adversarial Multi-Source PAC Learning
 Preprint: <https://arxiv.org/abs/2002.10384>
- 2019 **Nikola Konstantinov**, Christoph H. Lampert: Robust Learning from Untrusted
 Sources
 In: *International Conference on Machine Learning (ICML)*, 2019
- 2018 Dan Alistarh, Torsten Hoefler, Mikael Johansson, **Nikola Konstantinov***, Sarit
 Khirirat, Cedric Renggli: The Convergence of Sparsified Gradient Methods
 In: *Conference on Neural Information Processing Systems (NeurIPS)*, 2018
- 2018 Dan Alistarh, Chris De Sa, **Nikola Konstantinov***: The Convergence of
 Stochastic Gradient Descent in Asynchronous Shared Memory
 In: *ACM Symposium of Principles of Distributed Computing (PODC)*, 2018
 * **Alphabetic order**

SKILLS

IT skills	Experienced with: Python, R, LaTeX Have worked with: C++, Matlab, HTML, Mathematica
Languages	Fluent: English, Bulgarian (native) Conversational: German, Russian

TEACHING AND EXTRACURRICULAR ACTIVITIES

Teaching	IST Austria: Teaching Assistant - 02.2020 – 04.2020: Formal Methods for Learned Systems - 11.2018 – 01.2019: Deep Learning with Tensorflow - 10.2018 – 11.2018: Statistical Machine Learning
Responsibilities	IST Austria: Student representative in Data Science - 2018 – 2020: Representing Data Science students on meetings with faculty; providing feedback about related postgraduate courses; welcoming first-year students interested in Data Science Oxford University Bulgarian Society - 2015 – 2016: President – organising weekly talks, film nights, joint meetings with other university societies; updating the society's website - 2014 – 2015: Secretary – assisting the president in organisational matters; communicating with members and prospective applicants
Summer Schools	Machine Learning Summer School (MLSS), Madrid 2018 - 08.2018 – 09.2018: Two weeks of talks on various areas of machine learning, taught by world-leading experts in the respective fields
Olympiads	In Mathematics: - 20th international “DUEL” competition (Czech Republic, 2012): First place - Princeton University Mathematical Competition 2011: part of the school team of eight students, which won Third Place in the Power Round (Team Project) - Junior Balkan Mathematical Olympiad 2008: Bronze medal - Bulgarian National Scholarship for Gifted students – in 4 consecutive years (2008 – 2011) due to top-three places on national mathematical competitions
Interests	Sports: bouldering, yoga, squash, table tennis Hobbies: mountain hiking, reading fiction