# Jovana Mitrovic

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#### **ACADEMIC**

### Department of Statistics, University of Oxford

(10/2014 - present)

PhD Student. Clarendon Scholar. Supervisors: Yee Whye Teh and Dino Sejdinovic

• Areas of Research: Machine Learning - Kernel Methods, Deep Learning

# Department of Mathematics, ETH Zürich

(09/2012 - 07/2014)

 $\operatorname{MSc}$  in Applied Mathematics. Supervisor: Nicolai Meinshausen

• Master thesis: CSUR Decomposition for improved data analysis

# Department of Mathematics, ETH Zürich

(09/2009 - 05/2014)

BSc in Mathematics. Supervisors: Paul Embrechts and Marius Hofert

• Bachelor thesis: A Survey of Copulas in Machine Learning

#### **PROFESSIONAL**

Research Intern. DeepMind. London, UK

to begin in June 2017

**Research Intern.** Montreal Institute for Learning Algorithms, U. of Montreal (08/2016 - 11/2016) Supervisors: Yoshua Bengio and Aaron Courville

• developing inference methods for generative adversarial networks

Research Assistant. Department of Management, Technology and Economics, ETH Zürich

• Chair of Macroeconomics: Innovation and Policy

(09/2012 - 08/2013)

- revision and editing of academic papers
- Chair of Technology and Innovation Management

(09/2012 - 08/2013)

- maintenance of databases and websites

#### **PROJECTS**

#### Causality and Machine Learning

(01/2017 - present)

- advancing causal discovery methods with machine learning
- using causal thinking to derive better machine learning methods

# Inference in Generative Adversarial Networks

(08/2016 - present)

• Inference methods for networks with multiple stochastic layers

#### Weight Initialization for Deep Neural Networks

(02/2016 - present)

• Data-driven supervised method motivated by disentangling factors of variation at initialization

# Automatic Data Summaries for Approximate Inference

(07/2016 - 02/2016)

• Kernel-based approach to summary statistics estimation

## REFEREED PUBLICATIONS

Mitrovic, J., Sejdinovic, D., and Teh, Y. W. DR-ABC: Approximate Bayesian Computation with Kernel-Based Distribution Regression. ICML 2016.

## WORKSHOP PUBLICATIONS

Mitrovic, J., Sejdinovic, D., and Teh, Y. W. Deep Kernel Machines via the Kernel Reparametrization Trick. ICLR 2017.

#### INVITED TALKS

• Zurich Machine Learing and Data Science Meetup. Zurich

28 November 2016

"Data Summarization with Kernel Methods"

• ICML Main Conference. New York

22 June 2016

"DR-ABC: Approximate Bayesian Computation with Kernel-Based Distribution Regression"

#### **TEACHING**

Teaching Assistan	t, University	of Oxford
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• Probability	(04/2017 - present)
• Data Mining and Machine Learning	(01/2017 - 03/2017)
• Probability	(11/2016 - 12/2016)
• Probability, Applied Statistics	(01/2016 - 06/2016)
• Statistics and Data Analysis	(04/2016 - 06/2016)
• Statistical Data Mining and Machine Learning	(02/2016 - 03/2016)
Teaching Assistant, Department of Mathematics, ETH Zürich	
• Linear Algebra II	(02/2014 - 06/2014)
• Complex Analysis	(09/2013 - 12/2013)
• Numerical Mathematics II	(02/2012 - 06/2012)
• Complex Analysis	(09/2011 - 12/2011)

## HONORS AND AWARDS

• Numerical Methods for Engineers

# Clarendon Fund Scholarship, University of Oxford

2014

(02/2011 - 06/2011)

• Full scholarship for PhD studies awarded to the top 3% of accepted graduate students

## SOFTWARE SKILLS

Python, LuaJIT/Torch, R Computer Languages **Tools** Git, LaTeX