## Shpresim Sadiku

Curriculum Vitae

Institut für Mathematik, TU Berlin Straße des 17. Juni 136, 10623, Berlin www.shpresimsadiku.com ⊠ sadiku@zib.de

#### Personal Data

Place and date of birth Preshevë (Serbia), March 9, 1996

Citizenship Serbian citizen, German permanent resident

#### Education

09/20 -Ph.D., Mathematics, Technische Universität Berlin (TU Berlin), Germany

Phase II of Berlin Mathematical School (BMS)

Advisor: Prof. Dr. Sebastian Pokutta

Topic: Sparse and Explainable Adversarial Attacks

10/17 - 05/20 M.Sc., Mathematics in Data Science, Technische Universität München

(TUM), Germany

Advisor: Prof. Dr. Michael Wolf

M.Sc. Thesis: Adversarial Deformations for Neural Ordinary Differential Equations

10/14 - 07/17 B.Sc., Mathematics, University of Tirana, Albania

Advisor: Prof. Dr. Artur Baxhaku

## Publications and Preprints

10/23 Group-wise Sparse and Explainable Adversarial Attacks

Submitted, available on arxiv.org/abs/2311.17434. Joint with Moritz Wagner and Sebastian Pokutta.

## Employment History

#### Research Positions

09/20 -Scientific Assistant, Zuse Institute Berlin (ZIB), Germany

Department AI in Society, Science, and Technology (AIS<sup>2</sup>T)

Research Group Interactive Optimization and Learning (IOL)

09/19 - 03/20Student Assistant, Infineon Technologies AG, Munich, Germany

11/18 - 06/19 Student Assistant, TUM, Department of Electrical and Computer Engi-

neering, Munich, Germany

#### Internships

06/20 - 08/20 AI in Portofolio Management Intern, Assenagon Asset Management,

Munich, Germany

#### Teaching

08/23 Workshop Instructor, Calculus and Linear Algebra for Data Science, Hertie School, Data Science Summer School, Berlin, Germany

04/19 - 08/19 **Teaching Assistant**, Computational Statistics (MA3402), TUM, Department of Mathematics, Munich, Germany

## Attended Conferences and Workshops

- 03/24 Deep Learning: Theory, Applications, and Implications, RIKEN Center for Advanced Intelligence Project (AIP), Tokyo, Japan
- 08/23 10<sup>th</sup> ICIAM Conference, Waseda University, Tokyo, Japan
- 03/23 Workshop on Optimization and Machine Learning in Industry, Friedrich-Alexander-Universität Erlangen-Nuremberg, Nuremberg, Germany
- 09/22 BMS BGSMath Junior Meeting, Universitat de Barcelona, Barcelona, Spain
- 06/22 Workshop on First-Order Methods in Optimization, *Université catholique de Louvain*, Louvain-la-Neuve, Belgium
- 08/21 Deep Learning Theory Summer School, Princeton, NJ, US (online)
- 03/21 9<sup>th</sup> BMS Student Conference, BMS, Berlin, Germany (online)
- 08/19 ERGO Machine Learning Workshop, ERGO Group, Düsseldorf, Germany

#### Talks

- 08/23 AIP Seminar, RIKEN Center for Advanced Intelligence Project (AIP), Tokyo Minimally Distorted Explainable Adversarial Attacks
- 02/23 What is ...? Seminar, BMS, Berlin What is Backpropagation?
- 09/22 BMS BGSMath Junior Meeting, Universitat de Barcelona, Barcelona Wavelet-based Low Frequency Adversarial Attacks
- 03/21 9th BMS Student Conference, BMS, Berlin (online) Neural Network Approximation Theory
- 01/21 IOL-COGA Research Seminar, TU Berlin/ZIB, Berlin (online) Neural Network Approximation Theory

## Invited Research Visits

03/24 Invitation by Dr. Ha Quang, RIKEN AIP, Tokyo, Japan (1 week)

# Scientific Reviewing Activities Journals Referee

11/22 Constructive Approximation

#### Activities

- 06/23 Co-organizer, Lange Nacht der Wissenschaften (LNdW), ZIB
- 03/21 03/22 Co-organizer, MAI Division Seminar, ZIB
- 10/20 08/21 Co-organizer, IOL-COGA Research Seminar, TU Berlin

## Supervision of B.Sc. Theses

- 05/22 Moritz Wagner, TU Berlin Low-Frequency Adversarial Attacks
- 03/22 Maria Bulychev, TU Berlin Sparse Adversarial Attacks

## Distinctions

05/20 Admission to BMS

10/15 - 09/16 University scholarship for achieving the highest GPA of the class

03/11 - 03/14 Three first prizes and one third prize at Kosovo Mathematical Olympiad

Third prize at Serbian National Mathematical Olympiad

## Languages

#### Human

Albanian Native

English Fluent

TOEFL: C1 German Intermediate Goethe-Zertifikat: B1

Serbian Intermediate

Machine

Python Advanced

R Intermediate

MATLAB Intermediate