

# Dominik CSIBA

## PERSONAL DATA

---

ADDRESS: Na hrádzi 411, Jahodná, 93021, Slovakia  
PHONE: +421 918 402 708

EMAIL: [DOMINIK@OPERAM.COM](mailto:DOMINIK@OPERAM.COM)  
WEB: [www.dominikcsiba.com](http://www.dominikcsiba.com)

## EDUCATION

---

2014 - 2017 | Doctorate Degree (PhD.) in OPTIMIZATION IN MACHINE LEARNING  
School of Mathematics, UNIVERSITY OF EDINBURGH  
Thesis :  
*Data Sampling Strategies in Stochastic Algorithms for Empirical Risk Minimization*  
1<sup>st</sup> supervisor : PETER RICHTÁRIK | 2<sup>nd</sup> supervisor: CHARLES SUTTON

2011 - 2014 | Undergraduate Degree (Bc.) in MATHEMATICS, with focus on PROBABILITY & STATISTICS  
Faculty of Mathematics, Physics, and Informatics, COMENIUS UNIVERSITY, Bratislava  
Thesis: *Fingerprint Recognition* | Advisor: ALENA BACHRATÁ

## WORK EXPERIENCE

---

SINCE 2017 | Data Scientist at OPERAM, Bratislava

SUMMER 2016 | Machine Learning Applied Scientist Intern at AMAZON, Berlin  
Project: *Online Ad Allocation* | Manager: RODOLPHE JENATTON

SUMMER 2013 | Research Intern at INNOVATRICES, Bratislava  
Project: *Fingerprint Recognition* | Manager: JÁN LUNTER

SINCE 2011 | Marker at Slovak Mathematical Olympiad  
marking solutions for regional and national rounds (400+ solutions)

SINCE 2011 | Volunteer at TROJSTEN, Bratislava  
*Slovak NGO woking with talented students in Mathematics, Physics and Informatics*  
collecting and selecting new mathematical problems (100+ problems) | marking and giving feedback on solutions (500+ solutions) | organizing week-long camps for 30-40 students (8 times) | giving talks for high-school students (20+ talks)

## ACHIEVEMENTS & SCHOLARSHIPS

---

MAY 2015 | Best Contribution Award - 2<sup>nd</sup> place at OPTIMIZATION AND BIG DATA 2015, Edinburgh  
Awarded for: *Stochastic Dual Coordinate Ascent with Adaptive Probabilities* | Award Committee: ARKADI NEMIROVSKI (Georgia Institute of Technology), RODOLPHE JENATTON (Amazon Berlin)

2014 - 2018 | Principal's Career Development Scholarship, UNIVERSITY OF EDINBURGH  
14,000 GBP / year, awarded to top 3 incoming students in mathematics each year

MAY 2014 | Best student work in Applied Informatics in Czech and Slovak Republic  
STUDENT SCIENCE CONFERENCE, Ústí nad Labem  
awarded for a work based on my bachelor thesis

JUL 2012 | 3<sup>rd</sup> Prize, INTERNATIONAL MATHEMATICAL COMPETITION, Blagoevgrad, Bulgaria

SINCE 2012 | International Master in CHESS

2011 - 2014 | Excellence Scholarship, COMENIUS UNIVERSITY  
top 10% students: awarded 6 times, out of 6 possible

SEP 2010 | Honorable mention at MIDDLE EUROPEAN MATHEMATICAL OLYMPIAD, Strecno, Slovakia

## TEACHING EXPERIENCE

---

- 2017 - 2018 | Part-time teacher at *LEAF Academy*, Bratislava  
teaching a class of AP Calculus BC, 15 students
- JAN 2017 | Mentor at *Basecamp* - Data Science Bootcamp organized by KNOYD, Vienna  
12 hours on Introduction to Machine Learning and Optimization | voted as the best guest mentor
- APR 2016 | Lecturer for *Mathematics in Machine Learning*, COMENIUS UNIVERSITY, Bratislava  
25 students and professionals | 20 hours of lectures + 10 hours of tutorials
- 2014 - 2016 | Teaching Assistant at UNIVERSITY OF EDINBURGH  
PhD level: 2× Introduction to Research in Data Science | Msc. level: 2× Optimization Methods in Finance, Nonlinear Optimization, Modern Optimization Methods for Big Data Problems | Bc. level : Mathematics in Science and Engineering, 2× Numerical Linear Algebra and Applications, Fundamentals of Operations Research, Fundamentals of Optimization

## PAPERS

---

- SEP 2017 | Global Convergence of Arbitrary-Block Gradient Methods for Generalized Polyak-Lojasiewicz Functions  
D.C., PETER RICHTÁRIK, arXiv: 1709.03014
- JUN 2016 | Online Optimization and Regret Guarantees for Non-additive Long-term Constraints  
RODOLPHE JENATTON, JIM HUANG, , D.C., CEDRIC ARCHAMBEAU, arXiv: 1602.05394
- MAY 2016 | Coordinate Descent Faceoff: Primal or Dual?  
D.C., PETER RICHTÁRIK, arXiv: 1605.08982
- FEB 2016 | Importance Sampling for Minibatches  
D.C., PETER RICHTÁRIK, arXiv: 1602.02283
- JUN 2015 | Primal Method for ERM with Flexible Mini-batching Schemes and Non-convex Losses  
D.C., PETER RICHTÁRIK, arXiv: 1506.02227
- FEB 2015 | Stochastic Dual Coordinate Ascent with Adaptive Probabilities  
D.C., ZHENG QU, PETER RICHTÁRIK, ICML 2015

## LANGUAGES

---

SLOVAK:	Mothertongue	HUNGARIAN:	Mothertongue
ENGLISH:	Fluent	GERMAN:	Basic Knowledge

## PROGRAMMING

---

BASIC :	C++, R, Ruby	ADVANCED:	Python, MATLAB, Julia, $\LaTeX$
---------	--------------	-----------	---------------------------------