# Máté Baranyi



#### Education

**PhD 2018–ongoing**, Budapest University of Technology and Economics.

Doctoral School of Mathematics and Computer Science.

Subject: Mixed graphical models, supervised by Dr. Marianna Bolla

MSc 2016–2018, Budapest University of Technology and Economics.

MSc in Applied Mathematics, Financial Mathematics specialization, I graduated Summa Cum Laude.

MSc thesis: Graphical models and some related algorithms, supervised by Dr. Marianna Bolla

BSc 2013–2016, Budapest University of Technology and Economics.

BSc in Mathematics, Applied Mathematics specialization, I graduated Cum Laude.

BSc thesis: The separator of a subset of a semigroup, supervised by Dr. Attila Nagy

Secondary 2009–2013, Esze Tamás Gimnázium, Mátészalka.

school Advanced Final Exam in Mathematics

## **Experience and Teaching**

2018 fall- Teaching as PhD student, Budapest University of Technology and Economics.

**ongoing** I hold classes for electrical engineering students on probability theory.

2017 fall— **Demonstrator**, Budapest University of Technology and Economics.

2019 spring Grading weekly homeworks and administrating the result table for courses hold for mathematics students,

called Mathematical Statistics, Statistics I., Markov processes & Martingales.

2017 august- Intern, Morgan Stanley Budapest.

2018 march Model Risk Management internship in the Institutional Equity Division. Writing and maintaining model

review documents for exotic equity-based financial products from model risk perspective.

#### **Publications**

2019 M. Baranyi, R. Molontay, Effect of Mathematics Remediation on Academic Achievement – A Regression Discontinuity Approach, in 2019 International Symposium on Educational Technology (ISET), 2019, pp. 29–33.

doi:10.1109/ISET.2019.00016

2019 M. Bolla, F. Abdelkhalek, M. Baranyi, Graphical models, regression graphs, and recursive linear regression in a unified way, Acta Scientiarum Mathematicarum, 85 (12) (2019) 9–57.. doi:10.14232/actasm-018-331-4.

#### Conferences

2018 Dec 11th International Conference of the ERCIM WG on Computational and Methodological Statistics, Pisa, Italy.

Short presentation, titled Nonparametric regression estimation in chain graph models

2019 Jul International Symposium on Educational Technology (ISET), Hradec Kralové, Czechia.

Short presentation, titled Effect of Mathematics Remediation on Academic Achievement – A Regression Discontinuity Approach

# Computer and Programming skills

Intermediate knowledge of: **Python**, **R**, **LETEX**, **MatLab**. Basic knowledge of: Mathematica, C, C++, Excel, HTML.

## University and other projects

2018 summer- BME FIKP-MI/SC.

ongoing Within the framework of this project we are working on topics related to artificial intelligence and

time-series analysis, funded by the Ministry of Human Capacities (EMMI).

2017 fall Individual Projects II, MSc.

Within the framework of this course I worked on an Educational Data Mining related task supervised by

Roland Molontay from BME.

2017 spring Individual Projects I, MSc.

Within the framework of this course I worked on a Credit Risk Scorecard Development related task

supervised by Ildikó Priksz from OTP Bank.

2015 spring- Programming Projects I and II, BSc.

2015 fall Within the framework of these courses I worked on a task related to the mathematics of Voting Systems.

### Languages

Hungarian native language

English fluent (writing, reading), intermediate (speaking)

German intermediate (writing, reading), basic (speaking)