

Education

Informatics, PhD (2023 - ongoing)

Supervisor: Katalin Friedl

Budapest University of Technology and Economics

Department of Computer Science and Information Theory

My current research interest is classical and quantum algorithms, quadratic programming and QUBO.

Publications:

Nicolò Di Domenico et al., San Vitale Challenge: Automatic Reconstruction of Ancient Colored Glass Windows. *3rd International Workshop on Artificial Intelligence for Digital Humanities*, 2024.

Katalin Friedl and Viktória Nemkin, Simulations of quantum walks on regular graphs. In *Proceedings of the 12th Japanese-Hungarian Symposium on Discrete Mathematics and Its Applications*, 2023.

Computer Science Engineering, MSc (2023)

Budapest University of Technology and Economics

Received 2nd (2021) and 1st (2022) prize on the Scientific Students' Association research competition with topics on simulating quantum walks on various graphs and optimizing memory usage in quantum algorithm simulations. The topic of my thesis project was applications of quantum computing in bioinformatics.

Computer Science Engineering, BSc (2019)

Budapest University of Technology and Economics

Attended the competitive programming student club of my university, competed in ACM ICPC CERC three times, reaching 33rd place in 2017. Wrote my thesis project on automating the timetable creation of the university using constraint programming.

Teaching experience

Teaching assistant

2015 - 2018, 2020 - ongoing

Budapest University of Technology and Economics

Department of Computer Science and Information Theory

I coach the ICPC teams of our university and organize travel to CERC and Sapiientia ECN. We hold weekly preparation classes, compete on Codeforces and participate in open challenges such as San Vitale 2024.

I conduct practice sessions on discrete mathematics, theory of algorithms and probability theory in English and Hungarian, write study materials, correct midterms and finals and conduct oral exams. I was a personal lecturer for a year to a hearing impaired student through the equal opportunity program of BME.

Industry experience

Software Engineer II

2019 - 2020

Google Cloud

Warsaw, Poland

Worked on Cloud Composer, Google's workflow orchestration service in the cloud, built on top of the open source Apache Airflow platform. Took part in the customer service oncall rotation, presented at the First Warsaw Airflow Meetup, contributed to releasing Airflow 1.10.3 in Composer.

Software Engineer

2015 - 2019, 2020 - 2023

EN-CO Software

Budapest, Hungary

Worked on various desktop and web development projects. Contributed to the development of a customer service conversational bot in the Rasa framework, a neural network-based livestock weight estimation software and a discipline-specific Hungarian speech recognition system.