

Marek Dědič

Email: marek@dedic.eu Fin LinkedIn: https://www.linkedin.com/in/marek-dedic/

ABOUT ME

I am a machine learning researcher working at Cisco and specializing in neural networks and ways to exploit data structure with them. I combine a thorough knowledge of research topics with strong IT skills and experience in working with people. I love solving tough theoretical problems in ways that help people practically. In my free time, I do volunteer work in IT and education - preferably combining them.

WORK EXPERIENCE

[11/2016 – Current]

Machine Learning Scientist

Cisco Systems, Inc.

Address: Prague, Czechia

Name of unit or department: Cognitive Intelligence

I am doing research into machine learning and its applications to computer network security, specializing in deep neural networks, multi-instance learning, graph-based learning and structured data in general. I conduct my own research projects, as well as consulting projects of others in the company.

[10/2013 - Current] **Skiing instructor**

SKI - KLUB Hradec Králové

I am teaching kids aged 3 – 15 skiing.

EDUCATION AND TRAINING

[2019 - Current]

PhD in Mathematical Engineering

Czech Technical University in Prague

Address: Prague, Czechia Level in EQF: EQF level 8

$[\ 2016\ -\ 2020\]$ Master's degree in Mathematics in Information Technology

Czech Technical University in Prague

Address: Prague, Czechia Level in EQF: EQF level 7

VOLUNTEERING -

[12/2019 – Current] **Educational course lead** Junák – český skaut

I lead a 15 person team that plans and executes a 17-day course for aspiring patrol leaders each year. As such, we plan and execute our own activities and develop educational methods based primarily in experiential learning. My task is to manage the team, advance the course and its methods and long-term vision and communicate with the national scout organization HQ.

[12/2017 – Current] **IT Committee Member** Junák – český skaut

I am a member of the IT committee at the headquarters of the national scout organization of Czech Republic. Our job is to advise the executive board on issues relating to IT, as well as support and organize volunteer activity in the organization.

[2017 – Current] **Software developer** Junák – český skaut

I manage several software projects from product specification through development to external contributor relations. Additionally, I serve as a consultant for projects in collaboration with other institutions, such as Masaryk University. My areas of expertise are WordPress development and Google Workspace integration.

[11/2015 – Current] **Educational Course Instructor** Junák – český skaut

Lecturer of a summer camp providing a certified training course for aspiring patrol leaders. My specializations are team management, strategic planning and financial management. I am also planning and executing educational programs based on a methodology of experiential learning that we developed.

PUBLICATIONS -

[2022] Scalable Graph Size Reduction for Efficient GNN Application

Proceedings of the 22nd Conference Information Technologies – Applications and Theory (ITAT 2022)

[2022] Adaptive graph coarsening in the context of local graph quality

Data and Model Quality for Mining and Learning with Graphs: Methods and Open Challenges @ECML-PKDD 2022

[2021]

Experimental Investigation of Neural and Weisfeiler-Lehman-Kernel Graph Representations for Downstream Classification

Proceedings of the 21st Conference Information Technologies – Applications and Theory (ITAT 2021)

[2020] Loss Functions for Clustering in Multi-instance Learning

Proceedings of the 20th Conference Information Technologies - Applications and Theory (ITAT 2020)