PAVOL JOZEF ŠAFÁRIK
UNIVERSITY
IN KOŠICE

5 YEARS OF
DATA ANALYTICS MEETINGS

DAM team

Jaro Šupina

Jaro Šupina
DAM team

PAVOL JOZEF ŠAFÁRIK UNIVERSITY IN KOŠICE

Data Analytics Meetings are based at P. J. Šafárik University in Košice, which has over 60 years of history.

60. výročie Prírodovedeckej fakulty UPJŠ v Košiciach

1959

Foundation of the university

1963

Faculty of Science Mathematics

80's

Computer Science

DAM team

Jaro Šupina

UPJŠ

First signs of probability & statistics and neural networks

Probability & statistics

Institute of Mathematics

teachers, researchers
graduates in Economical and Financial Mathematics

Neural networks

Institute of Computer Science

G. Andrejková, E. Bruoth, T. Horváth, G. Semanišin, P. Vojtáš
researching and teaching neural networks

Jaro Šupina

DATA ANALYTICS MEETINGS

Data Analytics Meetings is a platform for exchanging experience among teachers, researchers, students, and industry, mainly in the field of data analysis, machine learning and artificial intelligence.

Jaro Šupina
DAM team

STARTING DAM

First discussions

of academics - Katka Lučivjanská, Gabriel Semanišin, Roman Soták, and Jaro Šupina

First talk

New Age of Artificial Intelligence
given by Marián Dvorský

Jaro Šupina

MAJOR ACTIVITIES

From the start in 2018 until COVID period, Data Analytics Meetings consisted of many activities.

talks & workshops

reading club

data days

study programme

TALKS & WORKSHOPS

1 – 2 times per month during semester

topics: machine learning, deep learning, statistics, math applications in industry, business side, cybersecurity, etc.

organizers: Katka Lučivjanská, Jaro Šupina, Bonka Danková, Tonka Matisová, Juliana Hockicková, Adam Marton, Daniela Pillárová, Diana Trellová

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MLMU KOŠICE
Machine Learning Meetup

DAM is a part of MLMU.

A community of those interested in (not only) machine learning.

MLMU supports meetups in 4 different cities in Czech Republic and Slovakia.

www.meetup.com/machine-learning-meetup-kosice/

READING CLUB

1 – 2 times per month during semester

smaller group of academics and people from industry

started reading **Deep learning by Goodfellow** and continued with **research papers**

led by **Marián Dvorský** and **Peter Bugata**

DATA DAYS

a half day of workshops, lectures and accompanying activities

primarily for **high school students** and other data enthusiasts

the aim is to **educate and inspire** young generations

STUDY PROGRAMME

Data Analysis and Artificial Intelligence (ADUI)

high demand from the industry

maximizes the legacy of the **Institute of Mathematics and the Institute of Computer Science**

bachelor's and master's degree

started in **2020/2021**

https://ics.science.upjs.sk/adui/

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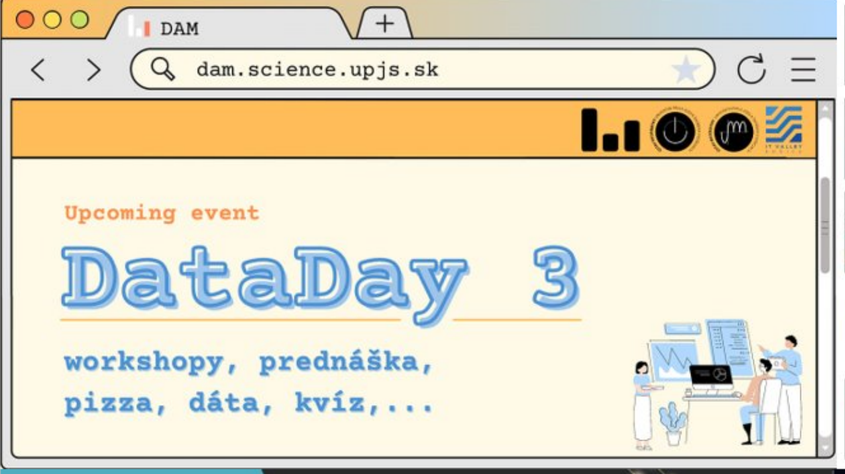
RESUMING DAM

during **COVID pandemic** - talks were **online**

after COVID pandemic - first talk in **September 2021**

talks **1 - 4 times per academic year**

more **workshops**


DAM
dam.science.upjs.sk
Upcoming event
DataDay 3
workshopy, prednáška,
pizza, dáta, kvíz,...

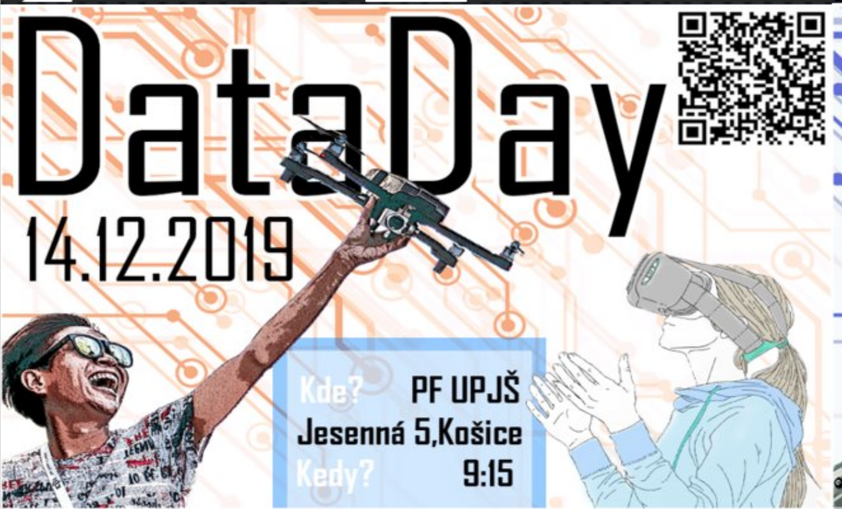

DATA ANALYTICS MEETINGS
AKO ROZUMIEŤ DÁTAM
A NENECHAŤ SA NIMI
OKLAMAŤ #2

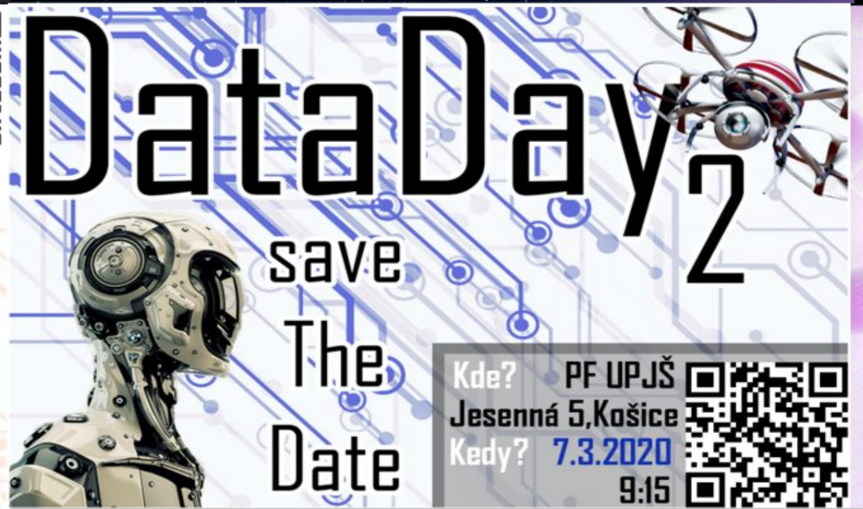

Data analytics meetings
MACHINE LEARNING &
STEELMAKING INDUSTRY
12/10/22
Wednesday
Jesenná 5
Košice
4:00
pm
U. S. Steel Košice, s.r.o.
A Subsidiary of United States Steel


CHRISTMAS
DATA & SECURITY
DAY
10/12/2022
9.00 a.m.
Gymnázium, Ľ. Štúra 26,
Michalovce


Data analytics meetings
MACHINE LEARNING - 4TH
PILLAR OF SPACE SCIENCE
18/05/22
Wednesday
Jesenná 5,
Košice
SJ2P08
4:00
pm
Šimon Mackovjak
(Slovak Academy of
Science in Košice)


DATA ANALYTICS MEETINGS WORKSHOP
HOW TO AUTOMATE
SPACE SCIENCE
8.3.2023, 5 PM
JESENNÁ 5, KOŠICE

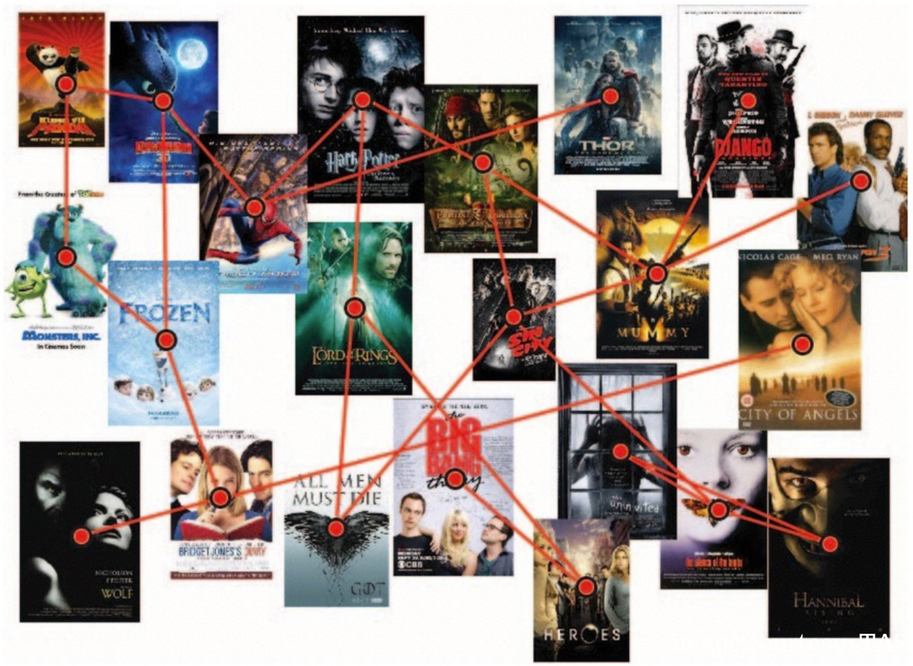

DataDay
14.12.2019
Kde? PF UPJŠ
Jesenná 5,Košice
Kedy? 9:15


DataDay 2
save
The
Date
Kde? PF UPJŠ
Jesenná 5,Košice
Kedy? 7.3.2020
9:15


AI AS A NEW
FRONTIER FOR
JOURNALISM
January 19, 2022
AI CENTER
FEE CTU
MACHINE LEARNING
meetups

THE POWER OF GRAPHS

in speeding up online learning and decision making



MICHAL VALKO
Sequel
Inria Lille - Nord Europe

20.2.2019
VKM miestnosť

15:15
Štart!

Aplikovanie grafov v konkrétnych produktoch - dáta pacientov, rozpoznávanie tváre, odporúčacie systémy.

Data Analytics Meetings (DAM)

THE POWER OF GRAPHS

in speeding up online learning and decision making

Abstract: I will describe adaptive solutions of using graphs for efficiently encoding, discovering, and using the (extra) information that is either explicitly or implicitly present in a given environment. This information can be, smoothness, side observations, state-spaces similarities, or a favorable reward structure which makes the learning faster or easier. I will focus exclusively on online learning and decision making to discuss the necessary tradeoffs that emerge but also when best-of-all-worlds behavior is possible. In particular, I will treat the tradeoffs of representation capacity vs. speed (computational complexity) and capacity vs. learning (statistical complexity) and discuss the optimal allocation of resources. I give specific examples of applying graphs in concrete products (patient data, face recognition, and recommender systems. Finally, I will give solutions for distributed computation with graphs and approximations needed when facing massive data. To sum up, while in the last decade we have been witnessing a huge leap in learning (with) low-level representations such as in vision, the high-level cognition remains a challenge. Graphs offer a natural representation and in this talk, I will attempt to convince you that they can be used to improve also systems working with low-level representations.

Related book: Michal Valko,
Bandits on graphs and structures

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COOPERATION WITH:

VSL Software, a.s.: Innovation of a software product for the field of health insurance using machine learning methods

VISSIM company: Optimization of vessel routes for turbines

Matsuko: Research and development of machine learning and computer vision technologies for photorealistic reconstruction of people in a 3D virtual environment

EIT Digital-InnoChange: training program From Idea to Entrepreneurship (Creativity, Responsibility, Entrepreneurship)

Jaro Šupina

DATA ANALYTICS MEETINGS

dam.science.upjs.sk

facebook.com/DAMupjs

DATA ANALYSIS AND ARTIFICIAL INTELLIGENCE

ics.science.upjs.sk/adui

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IN KOŠICE

THANK YOU FOR YOUR ATTENTION

DAM team

Jaro Šupina
Faculty of Science
Pavol Jozef Šafárik University
in Košice