KSVI

Department of Software and Computer Science Education

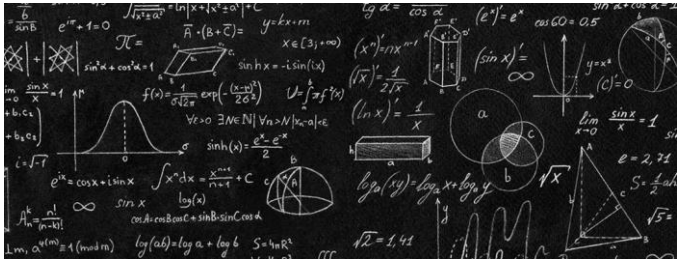
http://ksvi.mff.cuni.cz

(Not only) teaching computer science

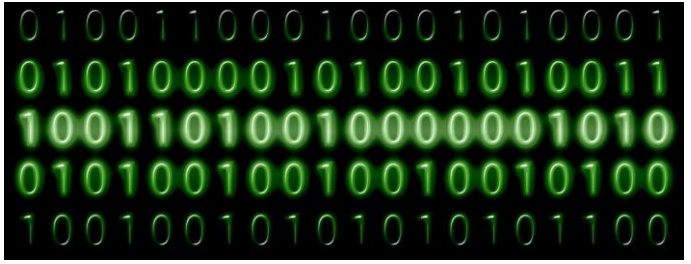
- Groups, individuals, theory, teaching, software...

- If a topic interests you
  - contact the individual directly
  - don't be afraid to come up with your own proposal

MULTIMEDIA EDUCATION LABORATORY



TEACHING TOPICS



THEORETICS

Computer Graphics Charles University

COMPUTER GRAPHICS GROUP

GAME DEVELOPMENT @CUNI.CZ

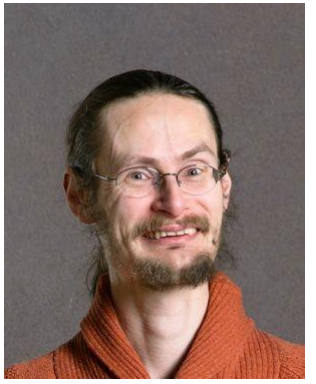
COMPUTER GAMES GROUP

NEUROSCIENCE

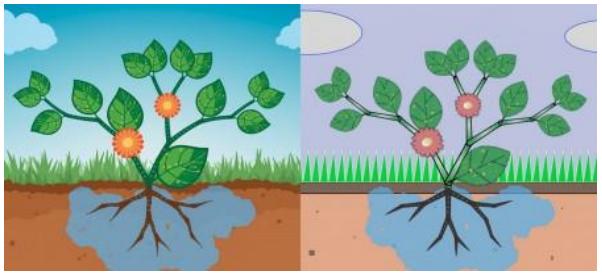
Laboratory of Advanced Multimedia Education Studies

https://ksvi.mff.cuni.cz/amulab/

Cyril Brom



- Even a programmer can become a teacher!
- Didactics of Informatics Scientifically (1st and 2nd level)
- What works in the media from an educational point of view
- Development of educational games and multimedia
- Experiments on humans (on children)



Datová Lhota
V počítači to žije!

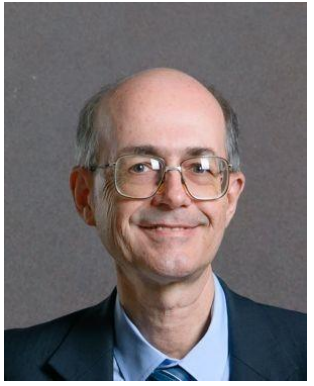
Other topics related to teaching

- Teaching computer science and programming
- Software support for teaching
  - Topics suitable for non-teachers

Tomas Dvorak

Pavel Töpfer

Tomas Holan



Klára Pešková

Lenka Forstová (SISAL)

Theorists

Tomas Dvorak

Problems at the boundary of theoretical computer science and discrete mathematics

- Generalized Gray codes between prescribed pairs of strings
- Experimental verification of Havel's hypothesis about hypercube bones
- Compact sufix automat in sliding window

Martin Pergel

(software-engineering theorist)

Discrete problems and algorithms

- Selected issues related to vehicle routing
- Universal backup
- Algorithmic problems related to intersection graphs
- Creative division game Diplomacy
- Visualization of graphs
- Smart home

Computer Graphics Group

https://cgg.mff.cuni.cz
/thesis-project-topics/

Computer
Graphics
Charles
University

Alexander Wilkie	Elena Šikudová	Josef Pelikan	Alban Fichet

cgg.mff.cu ni.cz

CompYter Graphics Charles Univer,ity

- **Thesis and project topics appearing throughout the whole year**
- **Feel free to contact the group members with your own topics**

Computer Graphics Charles University

Home | Members .., | Research .., | Publications .., | For Students . ., | Q, searct1 ...

- Be Study Plan [CZ]
- Comses
- Thesis & Project Topics

Thesis & Project Topics

List of topics ideas:

- Current Topics
  - " Weather & cloud classilication from webcam images
  - Intelligent t:ilt-shift transform
  - Eye tracking vs. deep net activation
  - Microstructure 30 Printing
- PastTopics

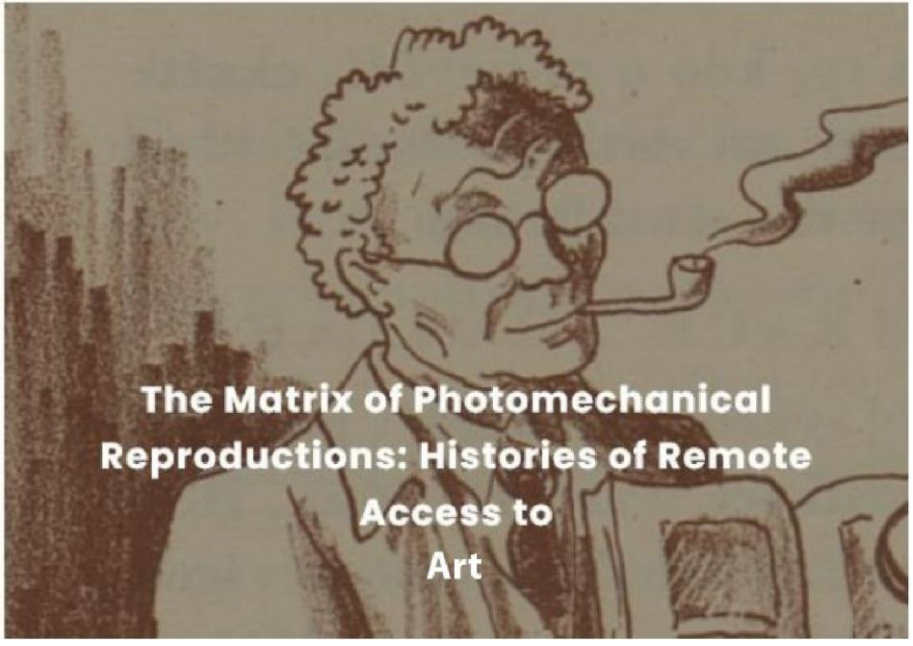
Hey, artists!

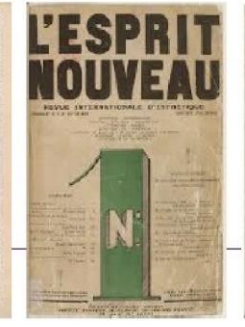
Computer Graphics Charles University

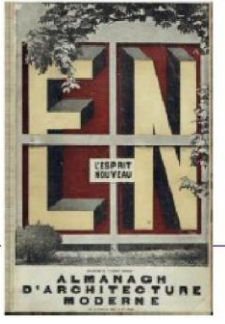
Long-term cooperation on a project with the Institute of Art History

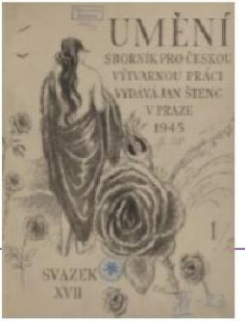
You can join a research team

- Analysis of PDF journal layout structure
- Data mining
  - Visual
  - Textual









Contact: Elena Sikudova

Computer Games Group

https://gamedev.cuni.cz/

GAME DEVELOPMENT
@CUNI.CZ

Vojtech Cerny	Lukas Kolek	Peter Guba	Petr Šimůnek

AI in context, didactics

http://www.AIvK.cz

Tereza Hannemann

- AI in context
  - How to teach AI in the perspectives of different disciplines?
  - How to popularize AI in public space?
- Didactics
  - How to didactically help to better learn about the digital world
    - socially excluded children
    - people in prison
  - How to teach children and their teachers about

AI?

hanneman@ksvi.mff.cuni.cz

Computational Systems Neuroscience Group

http://csng.mff.cuni.cz/

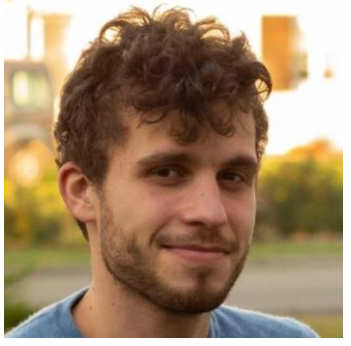
Ján Antolík

Karolína Korvasová

David Berling

Luca Baroni

Rémy Cagnol



Tibor Rózsa

Pomoz nám zkoumat mozek?

Projekty:

DATABÁZE: Data-store modul pro neurální simulátor

GRAFIKA: Vizualizátor neurálních modelů

SOFTWARE ENG.: Reproducibilný workflow pro simulace

PARALELNÍ PROG.: Optimalizace simulátoru na HPC

WEB: Web-based prohlížeč neurálních dat

A DALŠÍ...

VÍCE NA: http://csng.mff.cuni.cz/ antolikjan@gmail.com