Hana Roubalová

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EDUCATION

Charles University, Faculty of Mathematics and Physics — Oct 2019 – Sep 2023

Bachelor of Computer Science, Specialization in Artificial Intelligence

- Relevant Courses: Database Systems, Probability and Statistics, Mathematical Analysis, Introduction to Artificial Intelligence, Introduction to Machine Learning with Python, Discrete and Continuous Optimization, Non-procedural Programming, Seminar on Data Mining, Algorithms and Data Structures, Linear Algebra, Discrete Mathematics, Combinatorics and Graph Theory

EXPERIENCE

Computers for Seniors Course Instructor — Sep 2018 – Mar 2019

Středisko volného času Pacov

- Developed a specialized course curriculum for the course covering essential computer literacy skills, including file system and keyboard navigation, document creation, email guidelines, and web safety.
- Created study materials, presentations, and resources to complement course content and facilitate learning.
- Conducted the designed course, delivering lectures and practical sessions.
- Received exceptionally positive feedback from participants, reflecting increased confidence and proficiency in utilizing computers and navigating the online environment effectively.

Programming for Kids Club Instructor — Sep 2017 – Jun 2018

Středisko volného času Pacov

- Taught programming fundamentals to children aged 12 to 13 using visual programming language Scratch.
- Prepared engaging coding projects, primarily simple games, to facilitate learning and practical application of programming principles.
- Provided demonstrations, explanations, and hands-on assistance to children, aiding in project completion and understanding of programming concepts.
- Successfully guided all participants to complete a final project in C# programming language, showcasing their ability to transfer learned concepts to a new programming language.

PROJECTS

Color-Blindness Detection | *Python, Kivy, NumPy, Pandas, Matplotlib, scikit-learn, Git* — Sep 2022 – Jul 2023

- Developed simple application as the implementation part of my Bachelor's thesis titled Detecting Misleading Features in Data Visualization.
- Generated dataset of random graph images for application evaluation.

SKILLS

Programming Languages: Python, C#, Java, SQL, Basic Prolog
Developer Tools: Git, PyCharm, VS Code, Visual Studio, IntelliJ, SWI-Prolog, Rider
Libraries: NumPy, Pandas, Matplotlib, scikit-learn, TensorFlow
Soft Skills: Teaching, Public Speaking, Communication, Problem-Solving
Languages: Czech (native), English (fluent)