

Veronika Hendrychová

hendrver@fjfi.cvut.cz

vercah.github.io/veronika-hendrychova

github.com/vercah

Updated in August 2024

EDUCATION

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|---|----------------|
| Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering (FNSPE CTU) Master's degree in Mathematical Computer Science | 2024 - PRESENT |
| École Normale Supérieure, Rennes, France Two-semester Erasmus stay, 1st year of Master's degree in Computer Science | 2023 - 2024 |
| FNSPE CTU Graduated with honors from bachelor studies in Mathematical Computer Science | 2020 - 2023 |

AWARDS

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| "Super Bachelor Thesis" Award of FNSPE CTU Annual faculty bachelor thesis award | 2023 |
| 2nd place in the Rektorys Competition Presentations of CTU students' scientific works | 2023 |
| Scholarship of the Czech Literary Foundation Travel scholarship for my visit to Inria, France, to present my bachelor thesis | 2023 |
| Merit Scholarships of FNSPE CTU Excellent grades, graduation with honors | 2021, 2023 |
| "General Alois Liška" Award Numerous high-school competitions and olympiads | 2017 |

PUBLICATIONS

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| Dvořáková L., Hendrychová V., "String attractors of Rote sequences" Submitted for review to Discrete Mathematics & Theoretical Computer Science | 2023 |
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PRESENTATIONS

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| Inria, Rennes, France Presented "Mathematical modeling of phylogenetic compression" for the GenScale team | 2024 |
| DSB, Montpellier, France Presented "Mathematical modeling of phylogenetic compression" | 2024 |
| CIRM Week of CoW, Marseille, France Invited talk "String attractors of Rote sequences" | 2024 |
| Student conferences of the TIGR Research Group, Czechia Talks on the topic of String Attractors | 2024, 2023, 2022 |
| SeqBIM, Lille, France Presented "Mathematical model of phylogenetic compression" | 2023 |
| Visit at the Inria/IRISA Institute, Rennes, France Invited talk "String attractors of infinite words" | 1 week, 2023 |
| Moderator of the Physics Education session of "IAPS at a distance", online Event organized by the International Association of Physics Students | 2020 |

PROJECTS

Mathematical Model of Phylogenetic Compression

10 months, 2023 - PRESENT

Under Dr. Karel Břinda (Inria, France)

String Attractors of Pseudostandard and Rote Words

10 months, 2022 - 2023

Under Prof. Ľubomíra Dvořáková (CTU, Czechia) and Dr. Karel Břinda (Inria, France)

Constant Gap Sequences

1 month, 2021

Under Prof. Ľubomíra Dvořáková (CTU, Czechia)

CERN HSS Internship Programme, Switzerland

2 weeks, 2017

Internship in CERN for 24 selected high-school students from Czechia

Other projects published at <https://github.com/vercah>

TEACHING, TUTORING

Teaching Assistant in Linear Algebra (FNSPE CTU)

Fall semester, 2024

Lead exercise sessions of Linear Algebra for university students on a weekly basis

Lecturer at Science summer camps for children (FSci CUNI)

2018 - 2023

Created and lead various physics programs for children aged 10-15

Project supervisor at Science Week (FNSPE CTU)

2 days, 2023

Supervised group of high-school students

Math and English Tutor

2019 - 2020

Individual tutoring of a middle-school student

WORK EXPERIENCE

Core member of FYKOS (FMP, CUNI)

2020 - PRESENT

- Students' group at the Faculty of Mathematics and Physics, Charles University
- Organizing several major annual events and international competitions in physics for high-school students
- In-person events ranging from educational experience camp for 40 best participants to an international competition for ~1,200 participants; online competitions up to ~4,500 participants from 63 countries

IT developer and support of FYKOS

2020 - PRESENT

Development and deployment of static websites and a web app database in Nette, SQL, bash

Operations staff at the Program on AI and Reasoning (PAIR)

3 weeks, 2024

Two-week international camp for 25 selected students and 15 staff members, focused on AI and applied rationality

Database administrator and organizer of Science Week (FNSPE, CTU)

3 months, 2022

One-week event for 150 high-school students, focused on popularization of physics

LANGUAGES

- **Czech** (native speaker)
 - **Spanish** (~B1)
 - **English** (C2, CAE Certificate)
 - **French** (~B2, 1-year stay in France)
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KEY COURSES TAKEN

Mathematics – Calculus (4 semesters), Linear Algebra (2 semesters), Algebra, Discrete Mathematics (4 semesters), Differential Equations, Numerical Mathematics (2 semesters), Probability and Statistics, Complex Functions, Coding Theory

Computer Science – Programming in C++ (3 semesters), Linear Programming, Introduction to Algorithms, Introduction to UNIX, Computer Graphics (2 semesters), Introduction to Java, Complexity Theory, Coq Basics, Experimental Bioinformatics