Veronika Hendrychová

hendrver@fjfi.cvut.cz
vercah.github.io/veronika-hendrychova
github.com/vercah

Updated in March, 2024

EDUCATION

École Normale Supérieure, Rennes, France 2023 - PRESENT
Two-semester Erasmus stay, 1st year of Master's degree in Computer Science

Czech Technical University in Prague,
Faculty of Nuclear Sciences and Physical Engineering (FNSPE CTU) 2020 - 2023
Graduated with honors from bachelor studies in Mathematical Computer Science

AWARDS

"Super Bachelor Thesis" Award of FNSPE CTU 2023
Annual faculty bachelor thesis award

2nd place in the Rektorys Competition 2023
Presentations of CTU students' scientific works

Scholarship of the Czech Literary Foundation 2023
Travel scholarship for young scientists

Merit Scholarships of FNSPE CTU 2021, 2023
Excellent grades, graduation with honors

"General Alois Liška" Award 2017
Numerous high-school competitions and olympiads

PUBLICATIONS

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

PRESENTATIONS

DSB, Montpellier, France 2024
Presented "Mathematical modeling of phylogenetic compression"

CIRM Week of CoW, Marseille, France 2024
Invited talk "String attractors of Rote sequences"

SeqBIM, Lille, France 2023
Presented "Mathematical model of phylogenetic compression"

Visit at the Inria/IRISA Institute, Rennes, France 1 week, 2023
Invited talk "String attractors of infinite words"

Student conferences of the TIGR Research Group, Czechia 2024, 2023, 2022
Talks on the topic of String Attractors

Moderator of the Physics Education session of "IAPS at a distance", online 2020
Event organized by the International Association of Physics Students

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

Lecturer at Science summer camps for children (FSci CUNI) 2018 - 2023

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 tutoring 2019 - 2020

Individual tutoring of a middle-school student

WORK EXPERIENCE

Member of the leadership of FYKOS (FMP, CUNI) 2020 - PRESENT

- Students' group at the Faculty of Mathematics and Physics, Charles University
- Organizing several major annual events and competitions in physics for high-school students
- Annually coordinating project management of these events
    - Fyziklani - in-presence team physics competition in Prague, last year ~ 1200 participants from 21 countries
    - FYKOS Correspondence Competition - correspondence contest, ~ 200 participants, 6 rounds a year
    - FYKOS Camps - two week-long camps a year for the best participants of the Correspondence Competition
    - Physics Brawl Online - online team physics competition, last year ~ 3900 participants from 62 countries
    - Day with experimental physics - free excursions to scientific laboratories for ~100 high school students

IT developer of FYKOS 2020 - PRESENT

- Developing and maintaining several static websites using Nette framework and dokuwiki, deployment on server
- Maintaining SQL database of participants and its web application
- Providing IT support for both organizers and participants of the competitions

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
- Maintaining the database, communication with participants, maintenance of the website on the server

LANGUAGES

- **Czech** (native speaker)
- **English** (C2, CAE Certificate)
- **Spanish** (B2, self-estimated)
- **French** (B1, self-estimated)

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