

Veronika Hendrychová

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github.com/vercah

Updated in January, 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,

2020 - 2023

Faculty of Nuclear Sciences and Physical Engineering (FNSPE CTU)

Graduated with honors from bachelor studies in Mathematical Computer Science

AWARDS

“Super-Thesis” Award of FNSPE CTU

2023

For bachelor thesis

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

High school representation

PUBLICATIONS

Dvořáková L., Hendrychová V., [“String attractors of Rote sequences”](#)

2023

Published original results from bachelor thesis

INTERNSHIPS, CONFERENCES, COMPETITIONS

SeqBIM Conference, Lille, France

2023

Presented project “Mathematical model of phylogenetic compression”

Visit at the Inria/IRISA Institute, Rennes, France

1 week, 2023

Given talk on “String attractors of infinite words” for the GenScale team

Conferences of the TIGR Research Group, Czechia

2023, 2022

Talks on the topic of String Attractors

ScienCon, Poland

2022

Selected for a science workshop focused on choosing career path

Moderator of the Physics Education session of “IAPS at a distance”, online

2020

Event organized by the International Association of Physics Students

Fyziklani, Czechia

2019

In-presence team physics competition, 13th in category

FYKOS Physics Correspondence Competition, online

2018 - 2020

Two years of participation, both times 11th in category

CERN HSS Internship Programme, Switzerland

2 weeks, 2017

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

PROJECTS

Mathematical Model of Phylogenetic Compression

10 months, 2023 - PRESENT

Under Prof. Ľubomíra Dvořáková (CTU, Czechia) and 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)

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
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LANGUAGES, TOOLS

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| • Czech (native speaker) | • Python, C++, C#, Java, Coq |
| • English (C2, CAE Certificate) | • PHP, Nette, MySQL, XML, dokuwiki |
| • Spanish (B2, self-estimated) | • Git(Hub), (La)TeX |
| • French (B1, self-estimated) | |
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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