Veronika Hendrychová

hendrychova.xyz
hendrver@cvut.cz
github.com/vercah

EDUCATION

Czech Technical University in Prague,
Faculty of Nuclear Sciences and Physical Engineering (FNSPE CTU)   2024 - PRESENT
Master's degree in Mathematical Computer Science

École Normale Supérieure, Rennes, France   2023 - 2024
Two-semester Erasmus stay, 1st year of Master's degree in Computer Science

FNSPE CTU   2020 - 2023
Graduated with honors from bachelor studies in Mathematical Computer Science

AWARDS

Stanislav Hanzl Award   2024
Annual Czech Technical University award for gifted students

FNSPE CTU Award for gifted students   2024
Financial award for publishing university work in a journal

3rd and 2nd place in the Rektorys Competition   2024, 2023
Presentations of CTU students' scientific works

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

Scholarship of the Czech Literary Foundation   2023
Travel scholarship for my visit to Inria, France, to present my bachelor thesis

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
Accepted to Discrete Mathematics & Theoretical Computer Science

PRESENTATIONS

Inria, Rennes, France   2024
Presented "Mathematical modeling of phylogenetic compression" for the GenScale team

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

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

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

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

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)   2 semesters, 2024 - 2025
Leading exercise sessions of Linear Algebra

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 in Prague 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 world-international camp for 25 selected students, 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

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LANGUAGES

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

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