# Veronika Hendrychová

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

## EDUCATION

**Faculty of Nuclear Sciences and Physical Engineering,**      September 2020 - PRESENT
**Czech Technical University (FNSPE CTU)**

Third year of bachelor studies of Mathematics and Computer Science; CGPA: 4.0, weighted grade average 1,109

## AWARDS

**Merit scholarship**      June 2021
For excellent grades during 1st year of bachelor studies

**"General Alois Liška Award"**      June 2017
For excellent representation of Grammar-school Turnov during high-school studies

## WORK EXPERIENCE

**Member of leadership of FYKOS**      December 2020 - PRESENT
- One of the principal organizers of FYKOS student group organizing several annual physics competitions and other educational events for high-school students on an international level
- Coordinated project management of these competitions
    - 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
    - Fyziklani - in-presence physics competition in Prague, last year 1200 participants from 21 countries
    - Physics Brawl Online - online physics competition, last year 3900 participants from 62 countries
- Leader of the autumn week-school for 40 participants in 2022, coordinated 20 organizers
- FYKOS belongs to the Faculty of Mathematics and Physics, Charles University

**IT developer of FYKOS**      July 2020 - PRESENT
- Developing several static websites using Nette and dokuwiki
- Maintaining SQL database of participants and events and its web application
- Deploying and maintaining websites on server, handling redirecting to remote servers
- Designing scripts to simplify workflow
- Providing IT support for both organizers and participants of the competitions

**Organizer of science summer camps for children**      July 2018 - PRESENT
- Creating and lecturing physics programs for children
- Annual two-week summer camp for 90 elementary school pupils with focus on education in science
- Organized by the Faculty of Science, Charles University

**Database administrator and organizer of Science Week**      March 2022 - July 2022
- Maintaining the database, communication with participants, and maintenance of the website on server
- One-week event for 150 high-school students, focused on popularization of and education in physics
- Organized by the Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University

# PROJECTS

**String Attractors** – Project under Prof. Ľubomíra Dvořáková (CTU, Czechia)    2022 - PRESENT
and Dr. Karel Břinda (INRIA, France)
Studied string attractors and developed algorithms to work with sequences and their attractors

**Constant Gap Sequences** – Project under Prof. Ľubomíra Dvořáková (CTU, Czechia)    July 2021
Studied and gained insights in combinatorics on words

**LEGO Robots Programming** – Project under Dr. Lenka Kretschmerová (TUL, Czechia)    2016 - 2017
Assembled and programmed a robot with a temperature sensor using Lego MindStorms NXT and LabVIEW

---

# INTERNSHIPS AND COMPETITIONS

**Internship at the Inria/IRISA institute, Rennes** – week-long stay at the institute including    March 2023
giving an invited lecture on "String attractors of infinite words" for the GenScale project team

**ScienCon** – selected for science conference focused on choosing career path,    April 2022
organized by International Association of Physics Students in Poland

**Hands on CERN** – selected for excursion to CERN after taking part in the seminar    November 2020
organized by FNSPE, CTU

**Moderator in the Physics Education session of "IAPS at a distance"**    August 2020
Event of the International Association of Physics Students

**CERN HSSIP** – selected among the best 24 high-school students from Czechia    June 2017
for two-week-long internship in CERN

**Czech Programming Olympiad** – 1x regional round during high school    2019

**Czech Physics Olympiad** – 4x regional, 1x national round during high school    2016 - 2019

**Czech Language Olympiad** – 4x regional, 1x national round during high school    2016 - 2019

**Spanish Language Olympiad** – 1x regional round during high school    2016

---

# KEY COURSES TAKEN

**Mathematics** – Calculus (4 semesters), Linear Algebra (2 semesters), Algebra, Discrete Mathematics (4 semesters), Differential Equations, Numerical Mathematics, Probability and Statistics

**Computer Science** – Programming in C++ (2 semesters), Linear Programming, Introduction to Algorithms, Introduction to UNIX

**Physics** – Thermal and Molecular Physics, Mechanics, Electromagnetism, Waves and Optics

---

# LANGUAGES AND SKILLS

**English** – Level C2, CAE Certificate
**Spanish** – Level B2, self-estimated
**French** – Level A2, self-estimated
**Skills** – C++, Python, C#, PHP, HTML, Git, Nette, TeX, XML, MySQL, dokuwiki