

Veronika Hendrychová

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EDUCATION

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

September 2020 - PRESENT

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) and Dr. Karel Břinda (INRIA, France) Studied string attractors and developed algorithms to work with sequences and their attractors	2022 - PRESENT
Constant Gap Sequences – Project under Prof. Ľubomíra Dvořáková (CTU, Czechia) Studied and gained insights in combinatorics on words	July 2021
LEGO Robots Programming – Project under Dr. Lenka Kretschmerová (TUL, Czechia) Assembled and programmed a robot with a temperature sensor using Lego MindStorms NXT and LabVIEW	2016 - 2017

INTERNSHIPS AND COMPETITIONS

Internship at the Inria/IRISA institute, Rennes – week-long stay at the institute including giving an invited lecture on “String attractors of infinite words” for the GenScale project team	March 2023
ScienCon – selected for science conference focused on choosing career path, organized by International Association of Physics Students in Poland	April 2022
Hands on CERN – selected for excursion to CERN after taking part in the seminar organized by FNSPE, CTU	November 2020
Moderator in the Physics Education session of “IAPS at a distance” Event of the International Association of Physics Students	August 2020
CERN HSSIP – selected among the best 24 high-school students from Czechia for two-week-long internship in CERN	June 2017
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