

# KRISTYNA ZEMLOVA

"Everything is possible. The impossible just takes longer" – Dan Brown

+420 739 800 738  
zemlovak@vscht.cz

linkedin.com/in/krzem  
github.com/zemlovak

## WORK EXPERIENCE

- 2/2023 – 8/2023 **Product Analyst Intern** **MSD Prague**  
part-time  
Working on various projects among the team of Discovery Informatics at MSD Prague, from coding to UX Design and Business analysis.  
Agile Project Management / Jira / Figma / Microsoft Power Apps / Microsoft Power BI / React.js / UX Research / User Interface Design / Business Analysis / Typescript / CSS
- 9/2022 – 8/2023 **Researcher PhD student** **University of Chemistry and Technology Prague**  
part-time  
Working on research projects of the Bioengineering and Advanced materials group (BEAMlab) at the Department of Chemical Engineering UCT Prague, supervision of bachelor students, mentoring.  
Project: *Synthesis and characterization of porous materials for encapsulation of enzymes*, later extension into the Doctoral thesis and scientific publications.  
FTIR / SEM / BET Sorption Analysis (QuantaChrome Nova Series) / OriginPro / Python3
- 5/2021 – 9/2022 **Graduate researcher** **University of Chemistry and Technology Prague**  
full-time  
Working on research projects of the Bioengineering and Advanced materials group (BEAMlab) at Department of Chemical Engineering UCT Prague.  
Project: *Synthesis of porous materials for sorption of gases*, later extension into the Master's thesis and scientific publication.  
FTIR / SEM / BET Sorption Analysis (QuantaChrome Nova Series) / OriginPro / Python3
- 7/2020 – 9/2020 **Internship** **SPOLANA s.r.o.**  
part-time  
Internship at Spolana Neratovice, as part of the Master's degree programme at UCT Prague.  
Project: *Measurement and control system design of C202 rectification column for apparatus corrosion prevention.*
- 7/2019 – 12/2019 **Internship** **EATON European Innovation Center (EEIC)**  
part-time  
Internship at EEIC Roztoky, Power Distribution Department, Embedded Software Group.  
Project: *Smart Home Controller Web Application design*  
Angular / Typescript / SASS / HTML5
- 9/2015 – 12/2018 **Laboratory Technician** **Gymnázium Jana Nerudy**  
part-time  
Preparation of laboratory exercises and organization of workshops for high school students, administration of chemistry laboratory.

## EDUCATION

- 6/2024 – 1/2025 **Javascript Developer Requalification Course** **CodersLab Academy**  
Front-end Development: Javascript, VanillaJS, ES6, HTML5, CSS, SCSS, React, Git
- 9/2022 – **Doctoral studies** **University of Chemistry and Technology Prague**  
Chemical and Process engineering  
Thesis: *Synthesis and characterization of porous materials for encapsulation of enzymes*
- 9/2019 – 8/2022 **Master's degree (Ing.)** **University of Chemistry and Technology Prague**  
Chemical Engineering and Bioengineering  
Thesis: *Synthesis of porous materials for sorption of gases*
- 3/2022 **ATHENS** **Université PSL, École des Mines de Paris**  
Week long intensive course at Mines ParisTech.  
Course: *Le Langage C++(MP01)*

1/2020 – 6/2020	<b>ERASMUS+</b> Study stay at NTNU Trondheim during Master's degree studies, Study programme: Chemical Engineering	Norges teknisk-naturvitenskapelige Universitet Trondheim
9/2015 – 6/2019	<b>Bachelor's degree (Bc.)</b> Process engineering, informatics and management Thesis: <i>Programme for crystallographic data processing</i>	University of Chemistry and Technology Prague

## CERTIFICATES

12/2024	<b>UX/UI Design Principles Compact (Theory + Figma Exercises)</b> Self study of UX/UI design principles. A course led by Christine moonlearning. Figma	Udemy
12/2024	<b>The Complete 2024 Web Development Bootcamp</b> Self study of web development technologies on the Udemy platform. A course led by Dr. Angela Yu. HTML5 / CSS / SASS / Bootstrap / VanillaJS/ES6 / React / jQuery / SQL / PostgreSQL / Node.js / APIs / Git	Udemy

## PROJECTS

2021	<b>Optimisation of a cooling circuit</b> Group semestral project at the Department of Chemical Engineering, UCT Prague, in cooperation with industry. Solutions for reduction of cooling water consumption in the Contipro Inc. production. My contribution to the project was a GUI for reactors cooling circuit temperature modelling, written in MATLAB. Project defence at a microconference. MATLAB / MS Excel / Aspen Plus	University of Chemistry and Technology Prague
2018	<b>Graphical user interface for crystallographic data processing</b> Semestral project at the Department of Computer and Control Engineering, UCT Prague. Defence of the project at the Student Scientific Conference, later extension into the Bachelor's thesis. Python3 / NumPy / Pandas / Scipy / Matplotlib / PyQt5 / <del>TeX</del> Overleaf	University of Chemistry and Technology Prague
2017	<b>Graphical User Interface for Raman optical activity signal processing</b> Semestral project at the Department of Computer and Control Engineering, UCT Prague. Defence of the project at the Student Scientific Conference. MATLAB	University of Chemistry and Technology Prague

## ACCOMPLISHMENTS

11/2018 1st place	<b>Student Scientific Conference</b> Semestral project awarded at the Student Scientific Conference in the section Process Control and Data Analysis. Project: User interface for crystallographic data processing Python3 / NumPy / Pandas / Scipy / Matplotlib / PyQt5	University of Chemistry and Technology Prague
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## LANGUAGES

**Czech** - Native  
**English** - Advanced (C1)  
**French** - Advanced (C1)

## OTHER INTERESTS

Learning new stuff: I set a goal at 20 to try or learn at least one new thing each year. Since then, I managed to become a yoga teacher, learn chess, fly in a hot air balloon or acquire a driving license.

## EXTRACURRICULARS

- Yoga lessons for students and employees of UCT Prague (2018-2022).
- Tutoring classes for high school students in chemistry, mathematics & physics taught in French language.