

## Education

- 2021 – Present **Bachelor's degree**, *Faculty of Mathematics and Physics, Charles University*  
Three years programme Computer Science, branch General Computer Science.  
Received scholarship for excellent grades every year.
- 2013 – 2021 *Gymnázium, Plzeň*  
Selective secondary grammar school. Graduated with honors.

## Awards

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|------------------|---|------------------|
| 2× Bronze medal  | International Olympiad in Informatics             | 2021, 2020       |
| 32th             | Central-European Olympiad in Informatics          | 2020             |
| 18th, 34th, 28th | ICPC — Central European Regional Contest          | 2022, 2021, 2020 |
| 1st, 1st, 2nd    | ICPC — CTU Open (60 teams, Czechia & Slovakia)    | 2023, 2022, 2021 |
| 2nd, 9th         | Cloudflight Coding Challenge (1200 teams, Europe) | 2023, 2022       |
| 17th, 49th       | Reply Code Challenge (4000 teams, worldwide)      | 2023, 2022       |

## Experience

### Work experience

- 2022 – Present **Research Intern**, *Computer Science Institute, Charles University*  
*Research topics:*
  - Masked Superstrings as unified framework for textual  $k$ -mer set representations. Presented at international conference RECOMB-seq 2023.
  - Efficient indexing of masked superstrings with various  $k$  (ongoing)
  - $f$ -masked superstring as a generalization of masked superstrings (ongoing)*Supervisors:*
  - Karel Břinda, Inria/Irisa Rennes
  - Pavel Veselý, Computer Science Institute, Charles University
- Jun – Jul 2023 **Research Intern**, *DIMACS, Rutgers University, New Jersey, USA*  
*Research topic:* Division game  
*Supervisor:* Bhargav Narayanan, Department of Mathematics, Rutgers University
- Jul – Sep 2022 **STEP Intern**, *Site Reliability Engineering team, Google Germany*
  - Designed and implemented a Go library for automated remediations of SRE Best Practices violations.
  - Designed and implemented an API that uses the aforementioned library to automatically edit services' README.md files.
- Jun – Sep 2021 **Research Intern**, *CIMRA group, West Bohemian University*  
*Research topic:* Electromagnetic oven for creation of minirobots from elastomers.  
*Supervisor:* František Mach

Jul – Nov 2018 **Software Engineering Intern, Arcdata Praha**  
Developed a prototype of a mobile navigation app for Pilsen Zoo in Xamarin (C#).  
Presented at the Czech GIS ESRI Conference 2018.

### Voluntary work

2023 – Present **Scientific Comitee Member, CEOI 2024**  
Central-European Olympiad in Informatics.  
*Responsibility:* Creation of competition problems.

2022 – Present **Lead Organizer, Czech Selection Camp in Informatics**  
Selection camp for international olympiads in informatics.  
*Responsibility:* Leading a team of over 10 organizers.

2021 – Present **Organizer, Czech Olympiad in Informatics**  
Czech preliminary round to International Olympiad in Informatics.  
*Responsibility:* Creation of competition tasks and grading the participants' solutions.

2021 – Present **Organizer, KSP, Faculty of Mathematics and Physics, Charles University**  
A monthly computer science competition for secondary school students.  
*Responsibility:* Creation of algorithmic problems and co-organization of educational camps.

### Projects

2023 – Present **Co-founder, AiAiEyes**  
AiAiEyes — AI based app helping the visually impaired to recognize everyday objects.  
Cooperation with Czech Blind United (SONS).  
First price at Microsoft AI Accessibility Hackathon 2023 in Prague.

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## Languages

Czech	Native speaker	
English	C1	<i>Certificate IELTS Academic — band 7.5 (C1)</i>
German	B1	

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## Computer skills

Advanced	C++, Go, Python, C#, Dart
Good	C, JavaScript, Haskell, R, TeX, Git, Unix

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## Publications

Sladký, O., Veselý, P. & Břinda, K. Masked superstrings as a unified framework for textual  $k$ -mer set representations. *bioRxiv* (2023).