

Bc. Radek Cichra

Objective

Motivated Engineering student at the **Faculty of Information Technology (FIT)**, Czech Technical University, with a focus on Applied Informatics and Computer Science. Equipped with strong skills in IT, mathematics, and physics, and a passion for Linux systems. Currently seeking opportunities to contribute to innovative projects and research, leveraging problem-solving expertise and technical knowledge.

Education

- 2024–Present **Ing. (M.Sc.) in Computer Science – in progress**, *Czech Technical University – FIT*, Prague, Czechia
- 2024 **B.Sc. with honours in Applied Informatics and Computer Science**, *Czech Technical University – FNSPE*, Prague, Czechia
Specialized in Applied Informatics and Computer Science
- 2021 **Maturita Exam**, *Gymnázium Milevsko*, Milevsko, Czechia
Focused on Informatics, English, and Physics

Work Experience

- 2023–2024 **Developer, Template Numerical Library (TNL)**, *Czech Technical University*, Prague
Developing and implementing graph algorithms using TNL and CUDA as part of Bachelor's thesis
- 2024 **Co-Author, UTEI Course Scripts**
Co-authored 38-page guide on Deterministic Automata, Turing Machines, and grammars
- 2023 **Teaching Assistant, ZPRO Course**, *Czech Technical University*, Prague
Guided first-semester students in Python programming
- 2020 **English Tutor**, *Vachta Milevsko*, Milevsko
Tutored grades 5–11 in English language skills

Skills

- Languages **C/C++, Python, Ruby**, Java, TypeScript, GDScript
- Technologies Linux, Git, OpenMP, CUDA, Bash, (C)Make, Jupyter
- Other ~100 wpm typing; College graduate level mathematics & computer science theory

Certifications & Courses

- 2024 English C1 Certificate – Common European Framework of Reference (CEFR)
- 2024–2025 Chaos Software Data Structures in C++ and Machine Learning Course (with certificate)

Projects

- TNL Project Developed parallel graph algorithms for GPUs (e.g., Maximal Independent Set, Spanning Tree, Connected Components) as part of the Template Numerical Library. Source code available on TNL GitLab.
- Academic Projects Completed various academic projects including a basic photo editor and **parallel programs/solvers in C++ using OpenMP**. Source code can be found on GitHub.
- Lox Bytecode Compiler Implemented a bytecode compiler and simple VM for the Lox language as part of a semester course. Source code available on GitHub.
- UTEI Course Scripts Authored a guide on theoretical computer science. Can be found on GitHub.
- Discord Bot Created a Discord bot in Python with multiple commands, capable of naive web scraping and retrieving information. Utilizes a variety of modules. Source code available on GitHub.
- Self-Hosted Cloud Gaming Set up a self-hosted cloud gaming platform and remote desktop solution using 'Sunshine', 'Moonlight', and 'Tailscale'.

Personal Statement

Driven by a desire to tackle complex challenges in computer science, I continuously seek opportunities for growth and innovation. Inspired by classic video games, I strive to apply creativity and logical thinking to all my work.