

# ING. JAKUB RADA

[jakubrada@icloud.com](mailto:jakubrada@icloud.com) · [www.jakubrada.com](http://www.jakubrada.com) · GitHub: [radajakub](#) · LinkedIn: [radajakub](#)

## EDUCATION

---

<b>Czech Technical University in Prague</b> Artificial Intelligence	<b>09/2025 - present</b> PhD
<b>Czech Technical University in Prague</b> Artificial Intelligence	<b>09/2022 - 06/2025</b> Master (honors)
– <b>Thesis:</b> Probabilistic Modelling for Robust Scoring and Estimation of Geometric Relations	
<b>European Summer in Artificial Intelligence</b> Artificial Intelligence	<b>07/2024 - 07/2024</b> Master / PhD
<b>Korean Advanced Insitute of Science and Technology</b> Exchange programme	<b>02/2023 - 06/2023</b> Master
<b>Czech Technical University in Prague</b> Artificial Intelligence and Computer Science	<b>06/2019 - 06/2022</b> Bachelor (honors)
– <b>Thesis:</b> Comparing Exploration Methods in Partially Observable Stochastic Games	
<b>Gymnázium, Praha 6, Nad Alejí 1952</b> General Purpose High School	<b>09/2011 - 06/2019</b> High School

## PUBLICATIONS

---

<b>The ALNS metaheuristic for the transmission maintenance scheduling</b> Journal of Heuristics / Springer Nature	<b>05/2023</b> Paper
--	-------------------------

## EXPERIENCE

---

<b>Web and Mobile Software Development</b> SWEHQ   Part-time	<b>09/2025 - present</b> AI and Software Engineer
– Python, Typescript, Docker, NodeJS	
– Medior/Senior Full-stack developer and AI engineer building complex web and mobile applications, recently researching and building AI-powered RAG-like search system over private internal methodologies in finance	
<b>Web and Mobile Software Development</b> SWEHQ   Part-time	<b>06/2022 - 09/2025</b> Software Engineer
– Flutter, Dart, Vue.js, Python, Javascript, Typescript, Django, Docker, Android, iOS	
– Medior/Senior Full-stack developer and AI engineer building multiple complex web and mobile applications, recently researching and building AI-powered RAG-like search system over private internal methodologies in finance	
<b>Web Software Development</b> SWEHQ   Part-time	<b>06/2021 - 11/2021</b> Software Engineer
– Angular, Typescript, HTML, CSS, Javascript, NodeJS, Docker	
– Junior Frontend developer building a complex web app for a major financial group in the Czech Republic	
<b>ROADEF Challenge 2020</b> CIIRC CTU   Part-time	<b>07/2020 - 06/2021</b> Researcher and Developer
– C++, C, Python	
– Researcher and developer of a custom metaheuristic algorithm to solve complex combinatorial optimization problem	

## Front End Web Developer

Scalesoft | Part-time

08/2019 - 12/2019

Software Engineer

- CSS, Typescript, HTML, Javascript, NodeJS
- Two-week internship before university translating into a part-time job during the first semester

## HACKATHONS

---

### Rakathon 2025

04/2025

OnkoApp, 2nd place

Prague, Czech Republic

- Web application helping doctors to clearly share intermediate results and educational information and manage and confirm appointments to reduce administrative burden therefore saving time for actual treatment.

### Mistral AI Game Jam 2025

01/2025

Shyguy's Wingman, 6th place

Paris, France

- AI-powered game where user tries to convince the main character with text and voice to perform actions and reach the goal while the story and other characters develop according to an LLM

## FELLOWSHIPS AND SOCIETIES

---

### Upsilon Pi Epsilon

02/2024

Honor Society

Lifetime

## ACHIEVEMENTS

---

### Comparing Exploration Methods in Partially Observable Stochastic Games

11/2022

FEE CTU

Dean's award for exceptional Bachelor Thesis

### ROADEF Challenge 2020

06/2021

2nd place in the junior category

EURO

### Baltic 2011 International Round

06/2011

3rd place

SGP Systems

### Baltic 2011 National Round

05/2011

2nd place

SGP Systems

## CERTIFICATES

---

### TOEFL iBT (116/120)

09/2024 - 09/2026

Reading 29, Listening 29, Speaking 28, Writing 30

2 years

### Cambridge First Certificate in English (177/190)

06/2017

Reading 179, Writing 160, Listening 190, Speaking 165, Use of English 190

Lifetime

## SKILLS

---

**Languages:** Czech, English, Spanish

**Interests:** Running, Lifting Weights, Learning, Coding, Reading

**Programming Languages:** C/C++, Python, Julia, Javascript/Typescript, Rust, Haskell, Java, Dart, HTML/CSS

**Application Frameworks:** Flutter, Vue.js, NestJS, Angular, Django, NodeJS, Docker

**AI/ML Tools:** PyTorch, NumPy, JAX, scikit-learn, DeepMind Control Suite, Gurobi, PySAT, HuggingFace, Transformers

**Skills and Traits:** Diligence, Adaptability, Perfectionism, Problem solving, Responsibility