



Jiří Němeček

Date of birth: 28/05/1998 | **Nationality:** Czech | **Email address:**

contact@nemecekjiri.cz | **Website:** nemecekjiri.com | **Website:**

github.com/epanemu | **LinkedIn:** <https://www.linkedin.com/in/epanemu>

● ABOUT ME

AI enthusiast, strong believer in technological progress. Very passionate about the few things I love.

● EDUCATION AND TRAINING

08/2021 – 29/06/2023 Prague, Czechia

MASTER'S DEGREE Czech Technical University, Faculty of Electrical Engineering

Major: Artificial Intelligence

Minors: Data Science, Computer Vision

Part of a Team that performed best in class contest regarding Deep Learning applications

Notable projects:

1. Thrown dice number recognition (Python, OpenCV, PyTorch)
2. 3D scene reconstruction from images (Python, MATLAB)
3. Autonomous multi-agent exploration (Python, ROS-like API)
4. Steiner tree problem solver (C++) - Best performing implementation in class
5. LM-Cut heuristic search (C++)
6. Quantum Circuits simulator (Python)
7. Essay on AI and Regulation

Abroad experience:

University Politehnica of Bucharest

Warsaw University of Technology - Research Ethics

Website cvut.cz/en | **Field of study** Information and Communication Technologies |

Final grade Graduated with honors | **National classification** Average grade 1.086 (1 is best) | **Type of credits** ECTS |

Number of credits 174 |

Thesis Mixed-integer Programming in Machine Learning: Decision Trees and Neural Networks

06/2021 – CURRENT Prague, Czechia

PRG.AI MINOR prg.ai

Selective minor program, combining top courses on AI among **top Prague universities**

Courses taken:

1. Programming in Julia
2. Deep Learning and Reinforcement Learning
3. AI and Security, Ethics
4. AI and robotics

Website prg.ai/minor

Link <https://youtu.be/kPWIXGIYoXQ>

08/2017 – 06/2021 Prague, Czechia

BACHELOR'S DEGREE Czech Technical University, Faculty of Information Technology

Focus on **Artificial Intelligence**

Multiple programming languages of different paradigms learned (C, Python, Haskell, Racket, Prolog, Scala and many more)

Basics of Law for Informatics and Management

Cortex simulation and modeling, research

Notable projects:

- Using **Evolutionary Algorithms** to optimize solutions of TSP (Python)
- **Knowledge based system game AI** (Python)
- LAESA implementation (Python)
- MP voting visualization (Python)
- Sudoku solver (**Prolog**)
- Open data handling and visualization (**Spark, ELK**)

Website cvut.cz/en | **Final grade** Graduated with honors | **National classification** 1.182 average (1 is the best) |

Type of credits ETCS | **Number of credits** 270 |

Thesis Using Evolutionary Algorithms for Navigating Through Maze-like Environments

08/2018 – 06/2019 Paris, France

ERASMUS EXCHANGE École pour l'Informatique et les Techniques Avancées (EPITA)

Optical character recognition application using Neural Networks (in C)

Website epita.fr

● WORK EXPERIENCE

06/2021 – 2022 Prague, Czechia

AI RESEARCH INTERN THE MAMA AI

Intern part-time position, focus on natural language processing (NLP), specifically text-to-speech.

Business or Sector Professional, scientific and technical activities | **Website** themama.ai

01/2020 – CURRENT Prague, Czechia

INSTRUCTOR OF ELEMENTS OF AI COURSE PRG.AI

Volunteer work in education of the public about AI

Business or Sector Information and communication | **Website** prg.ai/en

2017 – 2018

SOFTWARE DEVELOPER FIEDLER

08/2018 – 11/2018 Vienna, Austria

REMOTE GO DEVELOPER AIONFIRE GMBH

Startup project Janus Cloud

● LANGUAGE SKILLS

Mother tongue(s): **CZECH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C1	C1
FRENCH	B1	B2	A2	B1	A2
GERMAN	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● **DIGITAL SKILLS**

Programming Languages

Python | C++ | C | Bash | MATLAB | R | Scala | Java | Haskell | Racket | Rust | Prolog | Julia

Programming tools

Git | LaTeX | Docker | Databases, SQL and NoSQL | Elastic Stack (ELK) | Spark

General

Artificial Intelligence | Machine Learning | Data Science | Computer Vision | Web development | Functional programming | Linux

Python ML/Data Science libraries

PyTorch | Matplotlib | Numpy | OpenCV | Pandas | Scikit-Learn

● **ADDITIONAL INFORMATION**

PROJECTS

08/2020 - CURRENT

StatYourself Web app for various personal data collection

Productivity tracking, mental state tracking

JavaScript timeline widget

08/2019 - CURRENT

Smart home Django web interface, REST API

Linux system configuration

10/2019 - 03/2020

Ginkgotheka Map interactive utility, using mapy.cz API

HONOURS AND AWARDS

11/2019

Porsche engineering contest - 1st place - Porsche Engineering Traffic sign recognition

01/2019

Oracle academy - Database Design and Programming with SQL - Oracle

SOCIAL AND POLITICAL ACTIVITIES

08/2014 - CURRENT

Boyscout Rover

COMMUNICATION AND INTERPERSONAL SKILLS

Public Speaking

Teamwork

Working under pressure

Division of tasks

HOBBIES AND INTERESTS

Long distance cycling

Problem solving

Programming Competitions, Hackathons

Politics, Social system