

# Novak Stijepić

+381 69 730 963 | [novak.stijepic@gmail.com](mailto:novak.stijepic@gmail.com) | [linkedin.com/in/novakstijepic](https://linkedin.com/in/novakstijepic) | [github.com/novaktj](https://github.com/novaktj)  
Banjičkih žrtava 5b | 11000 Belgrade, Serbia

## SUMMARY

Software engineering student with hackathon wins, math olympiad medals and experience mentoring and building ML projects. Interested in agents, transformers, data engineering, PyTorch and robotics. An enthusiastic team worker with a passion for learning.

## WORK EXPERIENCE

- PFE Science and Engineering Center - Junior Mentor** Jan 2025 - Present
- Devised and created a website for enhancing our webinars, leading to a **4x increase in student questions** (NodeJS).
  - Mentored **4** students in person across **2** ML projects; held **4** lectures and workshops.
  - Led team to install Python and Torch on 30+ unique student machines in 15 minutes to enable a workshop.
  - Eagerly contributed to small operational tasks.
- PFE Science and Engineering Center - Trial Junior Mentor** Jan 2024 - Dec 2024
- Demonstrated core mentorship and technical skills necessary for promotion to Junior Mentor.
- United Nations Development Programme Serbia - National Consultant for Informatics Lectures** June 2025 -
- ML Intern at Serbian startup.

## EDUCATION

- School of Electrical Engineering (ETF) at University of Belgrade** Oct 2023 – Sept 2027  
*Bachelors in Software Engineering — 9.81 average grade*
- Expected graduation: **Sept 2027**
- Mathematical Grammar School, Belgrade** 2019 – 2023  
*Test scores:*
- ACT: 36/36 (36, 36, 36, 36)
  - GRE: 170/170 quantitative; 163/170 verbal; did the test in high school for a scholarship

## SKILLS

- Programming Languages:** Python (Primary), C, C#, C++, Rust, SQL (SQLite)
- Tools & Platforms:** Git, Bash, Google Cloud Platform (GCP - Basic), Microsoft Azure (Basic)
- Communication & Soft Skills:** C1 English (IELTS 8.0), Teamwork, Communication, Public Speaking

## PERSONAL PROGRAMMING PROJECTS

- Machine learning and Data Science:**
- Implemented transformer decoder from scratch with MHA and positional embedding for next-token prediction
  - Exam generation agent - perfected prompt and data input with human feedback to generate practice exams - used by 8 students
  - XG metric improvement - feature engineering, Data Science, scraping
  - Motion estimation - team of 2 and mentors
  - Crowd counting with the Archive of Public Gatherings (AJS) - team of 3
- Software Engineering:**
- An ETL pipeline in Python to automatically scrape, parse, and structure unstructured curriculum data from hundreds of PDF documents for an agent downstream (Processed **456** PDFs; parsing accuracy **100%**)
  - CLI in C++ (university OOP project)

## HACKATHONS AND OLYMPIADS

- Descon 8.0 Belgrade Hackathon 2024 – winning team (IoT Arduino, data visualization)
- EuroBot Junior 2023 – winning team in Serbia; responsibilities: strategy, driving, 3D modeling, control software
- Balkan Mathematical Olympiad 2022 – bronze (IMO bronze level)
- Serbian national competition in mathematics 2022 – absolute 1st place

## COMPLETED COURSES

- Practical Deep Learning for Coders - fastai
- Harvard CS109x – Data Science with Python