Ivan Bartonicek

Applied engineering

Personal Profile

Czech engineering student from Prague, studying in the Netherlands, with strengths in challenging projects, team leadership, and interpersonal communication.

+420 724075117

Ivanbartonicek18@gmail.com

09.04.2005

www.linkedin.com/in/ivan-bartonicek

Soft Skills

Teamwork
Problem Solving
Adaptability
Communication

Languages

English
Czech

Certificates

IB Diploma
IGCSE Certificate
SolidWorks Certificate
Driving license
Captains License
Advanced Scuba

Skills

SolidWorks (CSWP Certification), Onshape
Python, C++, SQL
Siemens TIA Portal, MATLAB/Simulink, LabVIEW
Raspberry Pi, Arduino, GitLab, Excel

Personal Interests

Tinkering with technical projects, repairing and improving things using 3D printing, hiking, kitesurfing, snowboarding, and tennis.

Education

Bachelor's Degree in Mechatronics — **Sep 2024 - Present**

Fontys University of Applied Sciences, Eindhoven

Student and a member of an engineering team designing and building a road-legal electric vehicle, working with a €20,000 project budget and industry partners including EV Europe and 247TailorSteel. I am responsible for the middle chassis and battery placement design, including CAD modelling and FEA-based stress, torsional, and structural analysis to validate strength and safety.

International Baccalaureate (IB) Diploma — **Aug 2022 – Aug 2024**

Prague British International School, Prague

Higher Level subjects: Physics, Computer Science, Business
Standard Level subjects: Mathematics, English, Czech

Employment

Information Technology Analyst — **Jul 2025 - Present**

CETIN, Prague, Czechia

- Intern at a telecommunications infrastructure company.
- Analysed planned fiber-optic network polygons for profitability using GIS, SQL, Python, and Excel, collaborating closely with the planning department to adjust designs.
- Evaluated potential implementation of an Automated Storage and Retrieval System (ASRS).
- Conducted on-site warehouse visits, analysed material flow and storage challenges, researched ASRS solutions, and developed a business case for implementation.

Customer Service — **Jun 2022 - Apr 2023**

Nike Retailor, Prague, Czechia

Worked part-time at Nike for over a year, and gaining operational insight through multiple self-initiation sessions with the store manager.

Construction worker — **May 2020 - Jul 2020**

Podzimek a synové s.r.o., Prague

Employed for 8 weeks, assisting in the reconstruction of a Prague alley and learning to operate a core drill, mix and pour concrete, and verify using a laser level.

Personal Projects

Hydrogen Car Competition (H2GP World Final) — **2024**

- Member of a 5-person high school team that designed and built a hydrogen-powered RC car.
- Had only 6 months to design, build, and train, while competing teams in Czechia and worldwide had years of experience.
- Qualified in the Czech Republic and competed at the H2GP World Final in Las Vegas, placing 3rd out of 12 teams in the preliminary round (top 6 advanced).
- Team featured in Forbes, including a personal comment from each member.
- Designed heat sinks for the fuel cell system and worked on thermal management.
- Adjusted steering parameters and modified chassis dimensions to fit two fuel sticks.
- Optimized hydrogen line routing to the fuel cell and made engineering trade-offs between weight, power, and efficiency.

Orphan Children's Summer Camp, Rabštejn — *Rabštejn, Czechia* — **Recurring**

Fourth-year leader of one of four teams of children from multiple orphanages at a three-week residential outdoor camp. Organized activities and ensured hygiene and safety.

Robotics Competition – Faculty of Electrical Engineering, CTU in Prague — **2023**

Designed and built a Lego robot in a 3-member team for a national high school robotics competition. The robot used sensors to recognize coloured blocks and autonomously stack them in a specified order, competing in the final round against top student teams.