CZECH TECHNICAL UNIVERSITY IN PRAGUE
UNIVERSITY CENTRE FOR ENERGY EFFICIENT BUILDINGS

AI Specialist / Researcher

We are the University Centre for Energy Efficient Buildings of the CTU based in Buštěhrad near Kladno. We connect science with the commercial sphere and bring new solutions to the market that help our users to be one step ahead in technology. Our passion is buildings, cities, energy, environment, innovation and sustainability. We focus on applied research and development in grant projects and contract work for companies.

We are looking to add to our Intelligent Building Monitoring and Control department, which works closely with industry to develop new algorithms applied in the field:

- Modern Energy
- Automated sensor data processing
- Automated detection in time series or image data of control and optimization systems for buildings and subdivisions

Topics you can help us with (experience and experience in at least one area welcome)

- Develop and train machine learning models for prediction, e.g. in the field of energy consumption/production
- Integrate AI solutions into tools for managing energy units, buildings and their technologies
- Participate in the development of new algorithms in various application areas
- Implement AI algorithms on different HW platforms
- Creation of algorithms for data evaluation and management - deployment of AI tools
- Participate in the development of decision-making tools for companies and municipalities
- Work with real data (time series, image data, SCADA, etc.)
- Collaborate on multidisciplinary research and innovation projects (national and European)

What do we expect?

- Graduate or final year student of a technically oriented university (e.g. cybernetics, electrical, computer science)
- Artificial intelligence enthusiasts and its deployment in practical tasks
- A person with experience or knowledge in at least some of the areas:

- Using open-source libraries for AI work and implementation
- Predictive modelling (especially time series)
- Working with big data
- Working with LLM via API (calling language models)
- AI for image and sensor data processing
- Definition and implementation of neural networks or other AI methods

Advantage:

- Knowledge of energy, renewables or distribution network management
- Analytical thinking and ability to independently propose solutions
- Good knowledge of English (technical texts and communication)
- Basic knowledge of ML models
- Experience working on research/innovation projects

What can we offer?

- Full-time, min. 0,8
- Varied workload requiring a creative approach
- Work in a friendly team
- Opportunity to travel abroad and participate in Czech and international conferences as part of projects
- Work in a modern building in a quiet environment near Prague
- Flexible working hours
- Possibility of occasional work from home
- Background of a major scientific institution in the Czech Republic
- Interesting and innovative environment on the border between academy and corporate environment
- Opportunity to implement your own ideas, knowledge and skills and personal development
- Corporate and team sports and cultural events
- Allowance for meals and language courses
- Further education opportunities
- Servant Laptop
- Possibility of using an internal coach
- 30 days holiday
- Kids and dogs friendly office
- Free coffee and tea at the workplace
- Vitamin days

- A system for carpooling from Prague, especially from around Dejvice and metro A,
- Company transport from Bushrad to UCEEB and back
- All day reception services
- Creative and inspiring work in science and research and being part of projects that give back the green and blue to our country

What are the next steps?

Please send your CV together with a motivation letter to the following email address**:** **hr@uceeb.cz**

The deadline is **31. 7. 2025.** Please write **"AI Specialist"** in the subject line.

Start immediately or by agreement. Candidates will be contacted continuously.