
Applied Artificial Intelligence Department

Leader: Ing. Jiří Kadavý

Scope of work:

The Applied Artificial Intelligence Department is an operational unit of Charles University, which aims to promote efficient and safe use of artificial intelligence (AI) technologies within the university environment. The department focuses on **practical application of AI tools** in daily operation, with emphasis on increasing efficiency of activities, saving time and financial resources, improving the quality of services provided to students, employees and the public, and developing new opportunities arising from digital transformation.

Mission and objectives

- Search for and act on opportunities for application of AI technologies in the operational processes of the university.
- Develop, operate and manage AI agents and systems supporting the running of the university.
- Provide methodological, analytical and technical support in the implementation of AI solutions.
- Monitor current developments in the field of artificial intelligence and assess its impacts on the university environment.

Analysis and identification of opportunities for the use of AI

- Systematic analysis of processes and agendas within the university to identify areas suitable for automation or AI assistance.
- Assessment of benefits and risks of proposed solutions, including economic returns and impacts on work activities.
- Consultation with senior staff and departments of the university in the design of suitable scenarios for the use of AI.

Design, development and operation of AI agents

- Design of architecture, functionality and integration links of AI agents and systems.
- Development and configuration of agents using modern language models and other AI technologies.
- Integration of AI solutions into the service systems of the university.
- Ensuring operation, maintenance and continuous improvement of deployed solutions.

Analysis and testing of tools and platforms for the creation of AI agents

- Monitoring the development of tools and platforms for the development and management of AI agents.
- Testing and comparison of available solutions in terms of their suitability for the needs of the university (functionality, security, price, integration, data management).
- Recommendation of suitable technologies and approaches for different types of projects.

Coordination and standardization of AI projects within the university

- Assistance in the preparation of methodologies and standards for the design, implementation and management of AI solutions.
- Setting up processes for the approval and management of AI agents.
- Cooperation with the legal and IT departments in ensuring compliance with the legislation, especially in the areas of personal data protection (GDPR), copyright and ethics of AI.
- Support of faculties and other workplaces in their own initiatives in the field of applied AI.

Analysis of trends and education in the field of AI

- Regular monitoring of developments and trends in the field of artificial intelligence and their impact on the academic and operational environment.
- Creation of internal case studies of successful deployment of AI agents.

Cooperation and communication

- Coordination and cooperation with other departments of the university.
- Cooperation with external partners, suppliers and technology organizations in the field of AI.
- Sharing experiences and examples of good practice within and outside the university.

Project management and benefit assessment

- Project management for the implementation of AI technologies according to a specified methodology.
- Setting up metrics for measuring benefits (time savings, cost savings, quality of provided services).
- Regular evaluation of the effectiveness and impacts of implemented AI solutions.
- Keeping records and documentation of individual projects.

Conclusion

The Applied Artificial Intelligence Department is an important tool for the modernisation and efficient management of processes at Charles University.

Its aim is to bring **practical, sustainable and safe AI solutions** that help the University to streamline operations, support employees and students and strengthen its position as a modern and innovative institution.