OFFER

- Development of database technology for accessing and integrating complex unstructured and incomplete data.
- Efficient processing of graph data (XML, RDF, linked data, network traffic).
- Semantic web services.
- Similarity search in multimedia databases.
- Structural bioinformatic similarity retrieval.
- Similarity modeling.
- Recommender systems.
- Video retrieval.
- Database indexing.
- Application of Linked-data principle.
- XML and Web technologies and their exploitation.
- Schema evolution.
- Change management and adaptability of applications.

EXPERTISE

- Database methods for large-scale similarity search.
- Development of image descriptors.
- Content-based multimedia retrieval.
- Development of algorithms and computational tools for biological data analysis.
- Methods for data integration and extraction.
- Recommender systems.
- Database technology for content-based management and retrieval of unstructured data (text, multimedia, biological) and structured data (XML, RDF, relational) and their integration.

„Our primary objective is an investigation of techniques for data retrieval, visualization, modeling and processing in domains related to multimedia, open data, big data, bioinformatics.“
PARTNERSHIPS AND COLLABORATIONS

ACADEMIC PARTNERS
- University of Konstanz
- Universidad de Chile, Chile
- RWTH Aachen University, Germany
- University of Leipzig
- University of Milano Bicocca

INDUSTRY PARTNER
- Cisco Systems
- Profinit EU

NGO-SECTOR
- Collaboration with non-profit initiative OpenData.cz, which promotes the principles of Linked Data among governmental organizations.

MAIN RECENT PROJECTS
- TAČR TH03010276, The system for advanced analytics of large connected data based on similarity modeling, 2018–2020.
- NoSQL-Net – Managing Linked Data in NoSQL Stores under Schema Evolution.
- Highly Scalable Parallel and Distributed Methods of Data Processing in e-Science.
- Inteligent library – INTLIB.
- ETRAIN – Platform for train control and information systems based on Ethernet Communication Non-Metric Similarity Searching in Very Large Complex Databases.
- Handling XML Data in Heterogeneous and Dynamic Environments.

SEE OUR WEBPAGE
http://www.ksi.mff.cuni.cz/en