Wednesday July 10th		
Building S - Entrance hall		
8:30 - 9:30	Registration	
Building S - ROOM A		
9:30 - 9:45	IEA/AIE 2024 Welcome	
Parallel session 1 **09:50 - 11:20**		
Building S		
ROOM A Optimization	**ROOM B** Neural Networks	**ROOM C** e-Applications
Paper 70 **Simulation Optimization of Operating Room Schedules for Elective Surgeries** Maltseva, Daria*; Chen, Stephen; Whyne, Cari; Lex, Johnathan R.; Abbas, Aazad	Paper 54 **Formal Verification of Neural Networks: A "Step Zero" Approach for Vehicle Detection** Guidotti, Dario*; Pandolfo, Laura; Pulina, Luca	Paper 27 **A method for Integrating of Knowledge model and Functional component and Application in Intelligent Problems Solver** Tran, Nha Phong; Nguyen, Hien D.*; Nguyen, Diem; Tran, Dung; Huynh, Anh; Le, Tu
Paper 79 **Towards Eco-Friendly Multi-Compartment Transportation: A New Bi-Objective Iterated Local Search Framework** OUERTANI, Nasreddine*; NAIT SIDI MOH, Ahmed	Paper 72 **Deep Residual Networks for Pigmented Skin Lesions Diagnosis** Nguyen, Thanh-Hai; Ha, Chau Ngoc; Thi Pham, Linh Thuy*; Pham, Thi Ngoc Diem; Tran, Thanh-Dien	Paper 29 **A sparse binary data clustering method for transaction data** Kuo, R. J.*; Fan, Chia-Jung; Nguyen, Thi Phuong Quyen
Paper 16 **Time Heals Unfairness: Efficient Dynamic Routing at an Autonomous Society** WEI, SIJIA*; Yishen, Peng	Paper 15 **PPG-based Heart Rate Estimation Using Unsupervised Domain Adaptation** Kim, Jihyun; Lee, Minjung; Cho, Hansam; Kim, Seoung Bum*	Paper 51 **A Computer Vision Based Approach for Energy-Efficient Air Conditioner Control** Nguyen, Tien; Vong, Phu; Tran, Hieu; Truong, Taddy; Nguyen, Binh Thanh*
Coffee break **11:20 - 11:50**		
Parallel session 2 **11:50 - 13:20**		
Building S		
ROOM A Cyber Security	**ROOM B** Data Mining	**ROOM C** Various Applications
Paper 31 **Training Scenario for Security Testing of the Kerberos Protocol** Lazarov, Willi*; Boháčík, Antonín; Kohout, David; Fujdiak, Radek	Paper 13 **Work in Progress Prediction for Business Processes Using Temporal Convolutional Networks** Mehrdad Bibalan, Yousef*; Far, Behrouz; Eshragh, Faezeh; Ghiyasian, Bahareh	Paper 78 **Exploring Simpson's Paradox Through the Lens of Fuzzy Causal Inference** Saki, Amir; Faghihi, Usef*
Paper 25 **Sandbox Environment for Offensive and Defensive Training in Smart Metering** Kohout, David*; Lazarov, Willi; Lieskovan, Tomas; Mlýnek, Petr	Paper 39 **Explainable Machine Learning for Intrusion Detection** Bellegdi, Sameh*; Selamat, Ali; Olatunji, Sunday; Fujita, Hamido; Krejcar, Ondrej	Paper 18 **"Hybrid Additive Manufacturing: A Convergence of Physical, Digital, and Social Realms Driven by Generative AI"** Terziyan, Vagan*; Kaikova, Olena
Paper 37 **HERMES DXP: an approach to military and non-military cyber threat intelligence sharing** Przybyszewski, Marcin*; Gierszal, Henryk; Tyczka, Piotr; Kruszyński, Arkadiusz; Skoufis, Christos; Pierret, Frédéric; Pure, Ivo	Paper 68 **Enhancing False-Sentence Pairs of BERT-pair for Low-Frequency Aspect Category Detection** Kikuchi, Masato*; Anda, Shogo; Ozono, Tadachika	Paper 42 **Knowledge-based Monitoring for Checking Law and Regulation Compliance** Klampfl, Lorenz; Wotawa, Franz; Jahaj, Ledio*
Building A - ATRIUM		
13:25 - 14:25	Lunch	

Wednesday July 10th		
Parallel session 3 **14:30 - 16:00**		
Building S		
ROOM A Optimization	**ROOM B** Neural Networks	**ROOM C** Machine Learning
Paper 83 **Accelerating Recurrent Neural Network Controllers Using Levenberg–Marquardt and Forward Accumulation Through Time in Closed-loop Control Systems with Parallel Computing and Weight Dropout Techniques** Sam, Maxwell; Kalyan Devalampeta Surendranath, Kushal; Fu, Xingang; Qingge, Letu*	Paper 66 **Weightless Neural Networks Based on Multi-valued Probabilistic Logic for Node for the Handwritten Digit Classification** Nedjah, Nadia*; Mourelle, Luiza de Macedo; Machado, Tarso	Paper 84 **Towards Addressing An Open Problem in Coupled Matrix Tensor Factorization for Satellite Imagery Data using Human-in-Loop** RAGE, Uday Kiran*; Maharana, Abinash; Ohtake, Makiko; Ogawa, Yoshiko
Paper 34 **Learning Causality under Uncertainty for Egocentric Action Anticipation** Garrido, Antonio*	Paper 80 **Parallel Implementation of a Convolutional Neural Network on an MPSoC** Mourelle, Luiza de Macedo*; Nedjah, Nadia; Cardoso, Alexandre	Paper 64 **Representation and Generation of Music: Incorporating Composers' Perspectives into Deep Learning Models** HekmatiAthar, SeyyedPooya; Qingge, Letu; Anwar, Mohd*
Paper 86 **A Novel Instance Generator for Benchmarking the Job Shop Scheduling Problem** March, Carlos; Perez, Christian ; Salido, Miguel A.*	Paper 58 **Classifying Endangered Species in High-Risk Areas using Deep Learning** Atkinson-Abutridy, John*; Engdahl, Andrea; Brito, Cristian	Paper 81 **CAUSAL DEEP Q NETWORK** Khelifi, Elouanes*; Faghihi, Usef; Saki, Amir
Coffee break **16:00 - 16:20**		
Building S - ROOM A		
16:20 - 17:20	Keynote speaker - Hector Perez-Meana	
Building A - ATRIUM		
Banquet **19:30 - 21:30**		

Thursday July 11th		
Building S - Entrance hall		
8:30 - 9:00	Registration	
Building S - ROOM A		
09:00 - 10:00	Keynote speaker - Yinglin Wang	
Coffee break **10:00 - 10:30**		
Parallel session 1 **10:30 - 12:00**		
Building S		
ROOM A Machine Learning	**ROOM B** Computer Vision	**ROOM C** Various Applications
Paper 85 **A Novel Multi-Task Single-Step Traffic Congestion Forecasting Framework for Large-Scale Road Networks** Tejima, Kazuki; Saxena, Deepika*; Rage, Uday Kiran	Paper 48 **A Robust Component-based Template Matching Approach using Document Layout Graph for Extracting Information** Nguyen Vu, Son Lam; Nguyen, Tien Dong; Pham, Hai V*	Paper 28 **Improving Noise Robustness of Automatic Speech Recognition based on a Parallel Adapter Model with Near-Identity Initialization** Osaki, Takahiro*; Sudo, Yui; Itoyama, Katsutoshi; Nishida, Kenji; Nakadai, Kazuhiro
Paper 11 **Live Product Line Engineering Using Density-Based Clustering of CAD Models** Funk, Sebastian; Legat, Christoph; Busboom, Axel*	Paper 59 **Super-Resolution Methods for Wafer Transmission Electron Microscopy Images** Kim, Sungsu; Baek, Insung; Cho, Hansam; Roh, Heejoong; Kim, Kyunghye; Jo, Munki; Tae, Jaeung; Kim, Seoung Bum*	Paper 20 **Reconsidering Stochastic Policy Gradient Methods for Traffic Signal Control** Kato, Masahiro*; Kojima, Ryosuke
Paper 17 **Evaluation Techniques for Long Short-Term Memory Models: Overfitting Analysis and Handling Missing Values** Bolboaca, Roland*; Haller, Piroska; Genge, Bela	Paper 14 **Boundary-Focused Semantic Segmentation for Limited Wafer Transmission Electron Microscope Images** Jo, Yongwon; Bae, Jinsoo; Cho, Hansam; Roh, Heejoong; Kim, Kyunghye; Jo, Munki; Tae, Jaeung; Kim, Seoung Bum*	Paper 38 **Silver Surfer: Navigating the Parametric Protein Space with Genetic Algorithms** Marcu, Stefan-Bogdan*; Mi, Yanlin; Yallapragada, Venkata Vamsi Bharadwaj; Tangney, Mark; Tabirca, Sabin
Building A - ATRIUM		
12:05 - 13:05	Lunch	
13:05	Meeting at Building A - Lunch zone	
13:15	Departure - Conference trip to Baroque hospital Kuks	
14:30 - 16:30	Program at Baroque hospital Kuks	
16:30	Departure back to Hradec Kralove	
17:00 - 17:30	Arrival back to Hradec Kralove	

| Friday July 12th	
Parallel session **09:00 - 10:30**	
Building S	
ROOM A e-Applications	**ROOM B** Cyber Security
Paper 43 **A Comparative Study of Transfer Learning on CNN-based Models for Fault and Anomaly Detection in Industrial Processes** Salsano, Anita*; Menanno, Marialuisa; Bernardi, Mario Luca	Paper 73 **Utilization of Artificial Intelligence for the SIEM Logging Architecture Design in the Context of Smart City** Soběslav, Vladimír; Horalek, Josef; Almer, Lubomir*
Paper 75 **Fog-Based Ransomware Detection for Internet of Medical Things Using Lighweight Machine Learning Algorithms** Harzie, Ras Elisa; Selamat, Ali*; Krejcar, Ondrej; Fujita, Hamido	Paper 63 **Classification of datasets used in data anonymization for IoT environment** Medková, Jana*
Paper 52 **Verifying Autoencoders for Anomaly Detection in Predictive Maintenance** Guidotti, Dario*; Pandolfo, Laura; Pulina, Luca	
Coffee break **10:30 - 11:00**	
Building S - ROOM A	
11:00 - 11:30	Closing ceremony
Building A - ATRIUM	
11:40 - 12:40	Lunch

Building S - The Faculty of Science
Registration, Coffee breaks,
Conference ROOMS A, B, C

Hradecká 1285
500 03 Hradec Králové
Czech Republic

University of Hradec Králové
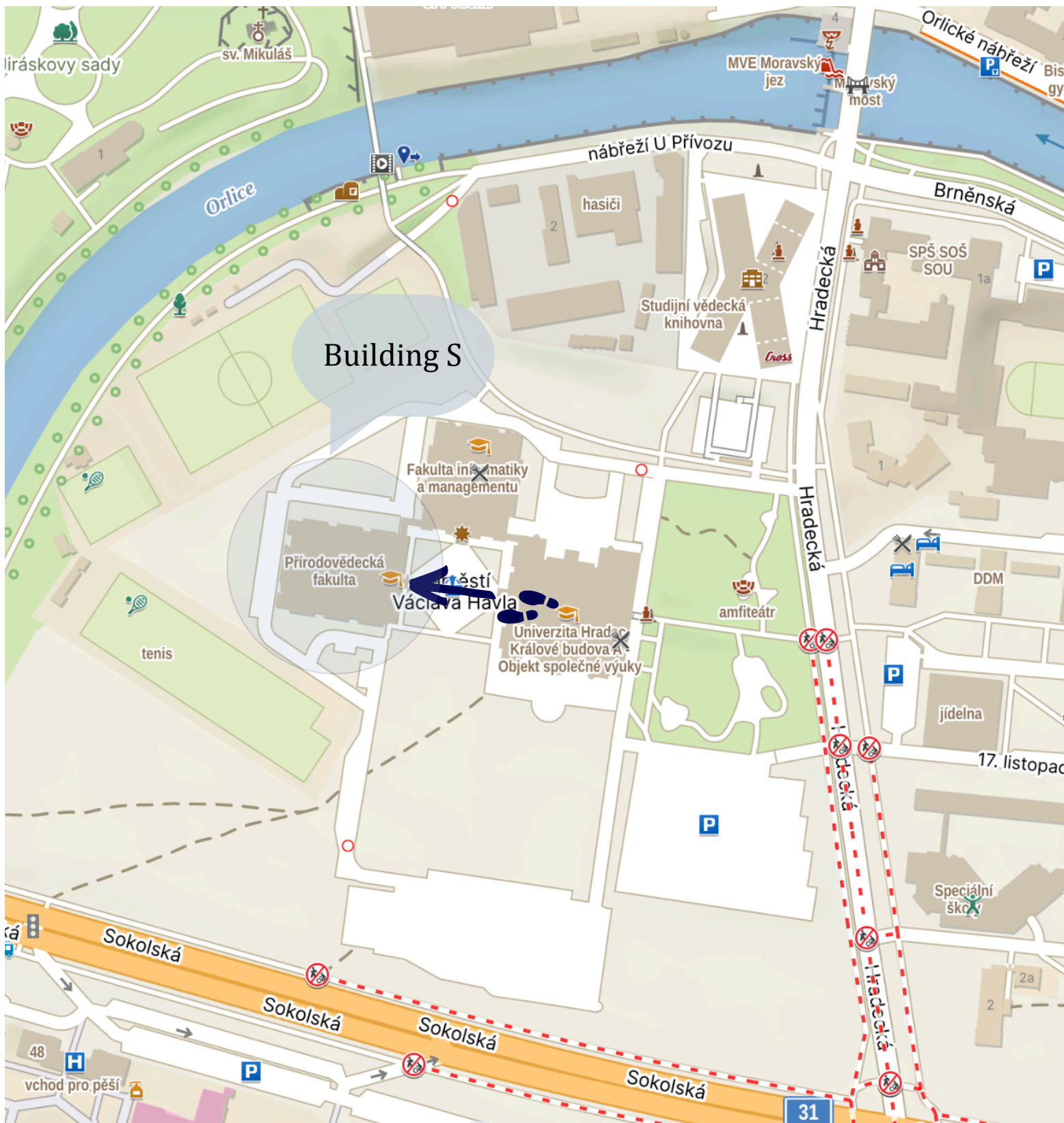
Building A - Common Education Facility
Atrium - Lunches and Banquet
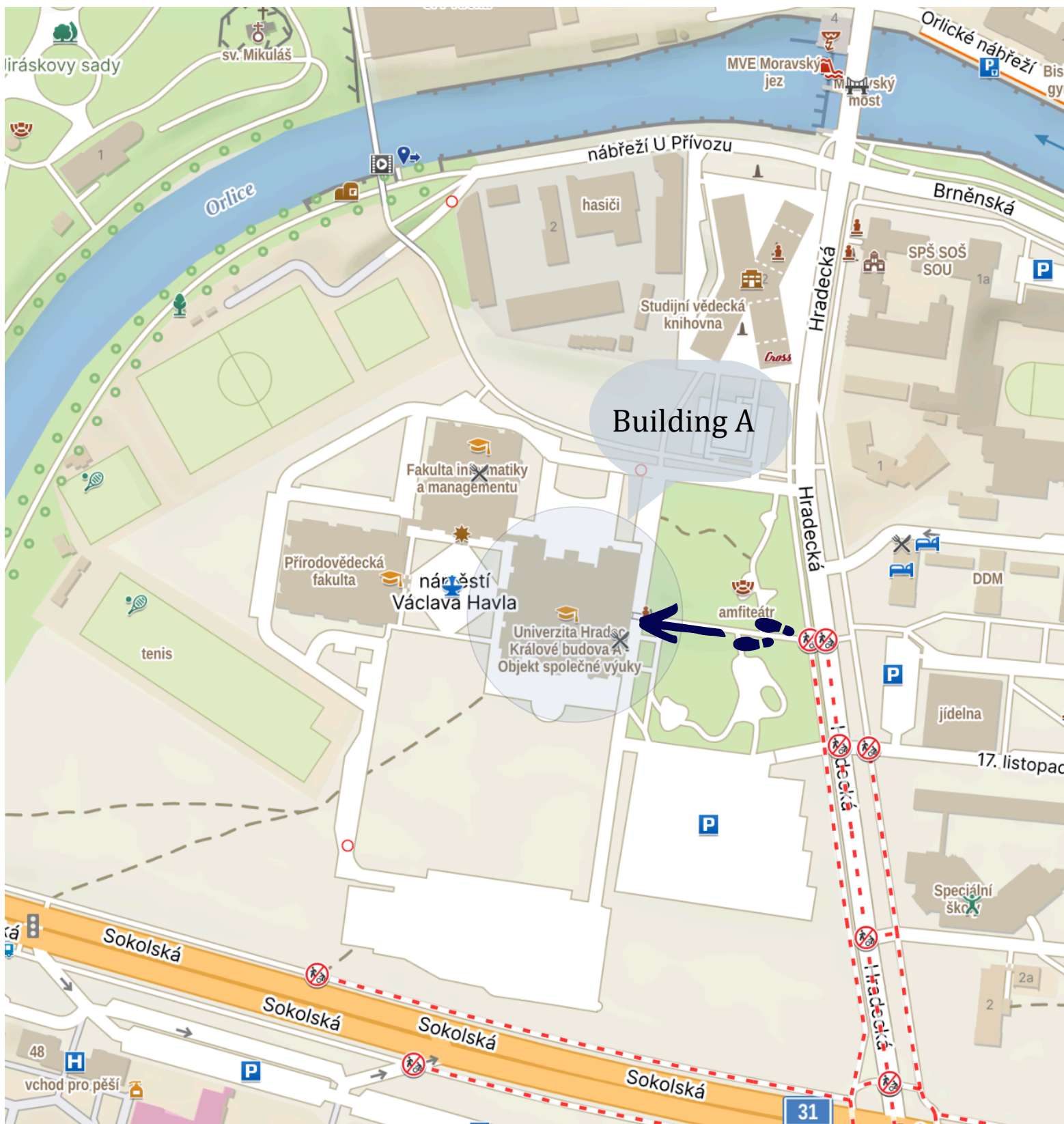
Building A

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Entrance

Building S

Building A

Entrance