

Scientific Seminar

Module no. or code	11
Module name	Scientific seminar
(If applicable) the module's courses	NA
Module content	<p>Practical research and scientific work skills and principles of good scientific conduct.</p> <ul style="list-style-type: none"> • Academic writing on AI topics in English (for non-native speakers) <ul style="list-style-type: none"> - Standard structure of academic texts – theses, technical reports, research articles, academic CV - Specific grammar features and word choices of English academic text and common pitfalls for non-native speakers - Good conduct in academic writing (citations, acknowledgments, plagiarism), open science, transparency, reproducibility - Literature review (dblp, google scholar, journals and conferences, predatory publishers) - Visual support of technical text (visual display of quantitative data, visual communication), academic presentations and poster design - Analysis of academic text, critical evaluation, peer-review process and principles • Academic and research support software tools <ul style="list-style-type: none"> - Bibliography systems (Zotero, Mendeley, ...) - Text editing with LaTeX - Software development and versioning (Git, GitHub, Bitbucket, etc.) <p>The seminar will be enriched by a series of invited talks delivered by external academic researchers and/or AI practitioners. Through these the students will learn about:</p> <ul style="list-style-type: none"> • Current trends and topics in AI research and applications <ul style="list-style-type: none"> - Transferability of theoretical research results to practical applications - Opportunities, open questions and challenges for AI research and applications (technical, societal, ethical, etc.) - Academic talk structure, audience targeting, academic exchange of knowledge and experience, constructive feedback and academic research discussion - Networking, establishing and fostering collaborations, formal/ informal interaction with senior researchers and practitioners

Module's learning outcomes	<p>Upon completion of the seminar students:</p> <ul style="list-style-type: none"> • can write English academic texts on AI topics taking into account the expected format (using appropriate mathematical typographical software - LaTeX), structure and the target audience; can adapt the language and visual support accordingly (article vs. presentation, etc.). • understand the importance of good academic conduct, the boundaries and consequences of plagiarism, and the benefits of open science, transparency and reproducibility, they can design their communication strategy accordingly (open access / open source, experimental documentation, etc.) • can conduct relevant literature search, analyze the quality of texts, can create and maintain a relevant bibliography in standard software tools and correctly reference previous work in their academic outputs • are aware of selected recent trends in AI research and main opportunities and challenges in transferring them to practical applications • can critically analyse academic text and provide constructive feedback, can interact with senior researchers in an informed discussion 		
Semester	2 nd semester		
Duration of module	1 semester		
Frequency	Winter term only		
ECTS-Credits	5		
Workload	Workload (Total)	Attendance time	Self-Study time (incl. exam preparation)
	150 h	60 h	90 h
Type of module	Compulsory		
Applicability of module	Serves as preparation for master thesis Can be integrated as optional course into M.Sc. Information Systems		
Conditions for participation			
Responsible for module	Prof. Dr. Magda Gregorová		
Lecturer			
Language of instruction, L. of examination	English		
Type of examination; Conditions for the award of CPs	Proof of attendance		

Teaching and learning formats of the module	Seminar
Literature	