Program: NeuroIS Retreat 2019

Vienna, Austria | June 4-6, 2019 | www.NeuroIS.org

June 4

NeuroIS Training Course 09:00-16:00

Theme: Getting Started with NeuroIS:
Choosing Tools, Methodologies, and Theories

Schloss Wilhelminenberg
Savoyenstraße 2, 1160 Vienna
Room: Bibliothek
Note: extra registration necessary

NeuroIS Society Annual Meeting 16:30-18:30
16:30-17:30 Board meeting
17:30-18:30 Meeting of members

Schloss Wilhelminenberg
Savoyenstraße 2, 1160 Vienna
Room: Bibliothek
Note: Participation only for NeuroIS Society members

Welcome Reception & Dinner *19:30-22:00*

Schloss Wilhelminenberg
Savoyenstraße 2, 1160 Vienna
Room: Wilhelminensaal

Welcome remarks by Fred Davis.

Note: This reception is the official start of the retreat.

The conference room of the NeuroIS Retreat in Schloss Wilhelminenberg is **Wilhelminensaal**.

June 5

Session 1 *09:00-10:45 Opening & Paper session*

9:00-9:05 *Welcome note, René Riedl*

9:05-10:45 *Paper session*

Circadian Rhythms and Social Media Information-Sharing
Gleasure

Does a Social Media Abstinence Really Reduce Stress? A Research-In-Progress Study Using Salivary Biomarkers
Whelan

Multicommunicating during Team Meetings and Its Effects on Team Functioning
Cameron, Addas, Spitzmüller

A Neuroimaging Study of How ICT-Enabled Interruptions Induce Mental Stress
Zhensheng, Hock-Hai

User Performance in The Face of IT Interruptions: The Role of Executive Functions
Mirhoseini, Hassanein, Head, Watter

Coffee Break 10:45-11:15

Session 2 *11:15-12:30 Paper session*

Investigating the Role of Mind Wandering in Computer-Supported Collaborative Work: A Proposal for an EEG Study
Klesel, Oschinsky, Niehaves, Riedl, Müller-Putz

The Effect of Technology on Human Social Perception: a multi-methods NeuroIS pilot investigation
Walla, Lozovic

Intelligent Invocation: Towards Designing Context-Aware User Assistance Systems Based on Real-Time Eye Tracking Data Analysis
Peukert, Lechner, Pfeiffer, Weinhardt

Designing Self-Presence in Immersive Virtual Reality to Improve Cognitive Performance - A Research Proposal
Jahn, Kordyaka, Ressing, Roeding, Niehaves

Lunch 12:30-14:00

Session 3 14:00-15:15 Paper session

Using fMRI to Measure Stimulus Generalization of Software Notification to Security Warnings
Kirwan, Anderson, Eargle, Jenkins, Vance

Do We Protect What we Own?: A Proposed Neurophysiological Exploration of Workplace Information Protection Motivation
Xiao, Warkentin, Walden, Johnston

Investigating Phishing Susceptibility – An Analysis of Neural Measures
Valecha, Gonzalez, Mock, Golob, Rao

Affective Information Processing of Fake News: Evidence from NeuroIS
Lutz, Adam, Feurriegel, Pröllochs, Neumann

Session 4 15:15-16:00 Keynote session

How to Tell your NeuroIS Story to an MIS Audience

Prof. Dr. David Gefen
Drexel University, USA

The philosophy of science and methodology of neuroscience, neuroIS included, is different from that of the more "traditional" philosophies of science and methodologies in MIS such as surveys, design science, archival data analysis, and various types of ethnographic research. Telling a neuroscience research story and making the claim for its contribution to such an audience can be challenging. This talk will present the case, make suggestions, and open the floor to an honest conversation of those issues.

Prof. Dr. David Gefen is a Professor of MIS and Provost Distinguished Research Professor at the LeBow College of Business, Drexel University. Professor Gefen is also the Academic Director of the Doctorate in Business Administration (DBA) Program. Previously Professor Gefen was a Senior Editor at MIS Quarterly where among other things he also managed neuroscience submissions. Professor Gefen is most known for his research into the role of interpersonal trust in a myriad of MIS contexts as well as for many methodology papers.

Coffee Break 16:00-16:30

Session 5 16:30-18:00 Short Paper Presentations

What Can NeuroIS Learn from the Replication Crisis in Psychological Science?
Conrad, Bailey

Techno-Unreliability: A Pilot Study in the Field
Kalischko, Fischer, Riedl

Wavelet Transform Coherence: An Innovative Method to Investigate Social Interaction in NeuroIS
Léné, Karran, Labonté-Lemoyne, Sénécal, Fredette, Johnson, Léger

Towards a Software Architecture for Neurophysiological Experiments
Ioannou, Kindler, Baekgaard, Sadiq, Weber

Machine Learning based Diagnosis of Diseases Using the Unfolded EEG Spectra: Towards an Intelligent Software Sensor
Buettner, Rieg, Frick

The Impact of Symmetric Web-Design: a Pilot Study
Vasseur, Léger, Sénécal

Search Results Viewing Behaviour vis-à-vis Relevance Criteria
Gwizdka, Chang

An Adaptive Cognitive Temporal-Causal Network Model of a Mindfulness Therapy Based on Humor
Mohammadi Ziabari, Treur

Neural Correlates of Dual Decision Processes: A Network-based Meta-analysis
Liang, Chou, Liu

Award Ceremony and Group Picture 18:00-18:30

Room: Wilhelminensaal

Handover of the Dr. Hermann Zemlicka Award for the "most visionary paper" and of the Best Reviewer Award

Social Event *19:00-23:00*

Danube Tower

(with bus transfer from the conference hotel and dinner on the top of the tower)

The Danube Tower is a Viennese landmark and an engineering masterpiece. It now stands resplendent in a stylish reinterpretation of the 1960s. The express lift will take you to a viewing terrace 150 metres up in the air, with an unforgettable 360° panorama. That's what makes the Danube Tower a popular destination – and the perfect starting point for all those who want to discover the city. A trip to the Danube Tower is something not to be missed: situated in one of the city's biggest and most beautiful parks, the Danube Park, it can be seen from afar, inviting visitors to discover its secrets. First your gaze wanders upwards, up the tower to its striking pinnacle. Once up there, it roams into the distance, to the margins of the city and even far beyond. These changes of perspective make a visit to the Danube Tower an unforgettable experience.

DEPARTURE FROM SCHLOSS WILHELMINENBERG, SAVOYENSTRASSE 2, 1160 WIEN (IN FRONT OF THE MAIN ENTRANCE OF THE HOTEL)

Please be aware there is only one departure time of the bus at 19:00 sharp!

June 6

Session 6 *09:00-10:30 Paper Session*

Exploring the Neural Correlates of Visual Aesthetics on Websites
Nissen

Mitigating Information Overload in E-Commerce Interactions with Conversational Agents
Ocón Palma, Seeger, Heinzl

Positive Moods Can Encourage Inertial Decision Making: Evidence from Eye-tracking Data
Huang, Kuo

Application of NeuroIS Tools to Understand Cognitive Behaviors of Student Learners in Biochemistry
Randolph, Mekbib, Calvert, Cortes, Terrell

Using Eye-tracking for Visual Attention Feedback
Toreini, Langner, Maedche

Coffee Break 10:30-11:00

Session 7 *11:00-12:30 Paper Session*

Interpersonal EEG Synchrony while Listening to a Story Recorded Using Consumer-Grade EEG Devices
Thammasan, Brouwer, Poel, Van Erp

Task Switching and Visual Discrimination in Pedestrian Mobile Multitasking: Influence of IT Mobile Task Type
Léger, Labonté-Leymoyne, Fredette, Cameron, Bellavance, Lepore, Faubert, Boissonneault, Murray, Chen, Sénécal

Perturbation-Evoked Potentials: Future Usage in Human-Machine Interaction
Ditz, Müller-Putz

Improved Calibration of Neurophysiological Measures Tools
Coustures, Fredette, Marquis, Courtemanche, Labonté-Lemoyne

On Using Python to Run, Analyze, and Decode EEG Experiments
Conrad, Agarwal, Calix Woc, Chiles, Godfrey, Krueger, Marini, Sproul, Newman

Lunch *12:30-14:00*

Session 8 *14:00-15:00 Hot Topic Talk*

The Importance of the Autonomic Nervous System for Information Systems Research

Dr. Karin VanMeter
Austrian Biotech University of Applied Sciences, Austria

The autonomic nervous system (ANS), also referred to as the 'involuntary nervous system', is the part of the peripheral nervous system supplying internal organ systems and glands. It consists of three portions, the sympathetic, parasympathetic, and enteric divisions, all of which largely regulate bodily functions unconsciously. The ANS plays a major role in homeostasis and adaptive functions and thus response to internal and external stimuli. Examples of external stimuli are changes in light, temperature, and general environment. The sympathetic branch regulates metabolic resources and coordinates the emergency response – "fight or flight". The parasympathetic division is responsible for "rest and digest", while the enteric branch is considered separately because of its location. While sympathetic activity is increased during the day, parasympathetic activity becomes more active during the night when regeneration occurs at the cellular and organ level, as well as the mental level. From an Information Systems (IS) perspective, the ANS is critical, for example, due to its role in stress processes. This talk describes fundamentals of the functioning of the ANS. Because reviews of the literature revealed that measures of ANS activity (e.g., pupil dilation, heart rate, blood pressure, skin conductance) play a significant role in NeuroIS research, this talk deals with a fundamental NeuroIS research domain.

Dr. Karin VanMeter studied Biology at the Paris-Lodron University of Salzburg where she received her doctorate in 1978. Her dissertation dealt with the three-dimensional fine structure of the hypothalamus and other various regions of the brain. Her extensive training in scanning and transmission electron microscopy led to a postdoctoral position with a leading scientist in the area of the hypothalamo-neurohypophysial system at the Iowa State University of Science and Technology (USA). After working in the Department of Anatomy she switched to the Department of Physiology and Pharmacology concentrating on studies on the brain and spinal cord after acute and chronic exposure to anticholinesterases. Dr. VanMeter then worked at the University of Maryland Medical School for four years, her research focus still on anticholinesterases. During this time, she discovered changes in the ultrastructure of neurons in the hippocampus spiking her interest in neuronal aging and neuropathology of neurons. Dr. VanMeter and her husband, a leading neurophysiologist, decided to return to Iowa seeking a position to allow more time for their young children. While she continued her research at Iowa State for several years, she was seeking a teaching assignment, again to be able to spend more time with her family. While previously teaching in the professional and graduate programs she now started teaching at the undergraduate level as well. In 2006 Dr. VanMeter was asked to write a textbook in Microbiology, followed by a textbook in Pathophysiology. In 2004 she returned as a lecturer in the Department of Biomedical Sciences of the College of Veterinary Medicine at Iowa State. Dr. VanMeter retired early and came back to Austria to aid in the care for her mother. During this time she started and is continuing as a guest lecturer at the Austrian Biotech University of Applied Sciences, and also is giving presentations in the field of neuroscience and aging.

Coffee Break 15:00-15:30

Session 9 *15:30-17:00 Short Paper Session*

Brand Visual Eclipse (BVE): When the brand fixation spent is minimal in relation to the celebrity
Rizvi

The Impact of Associative Coloring and Representational Formats on Decision-Making: An Eye-Tracking Study
Djurica, Mendling, Figl

Impact of Physical Health and Exercise Activity on Online User Experience: Elderly People and High Risk for Diabetes
Oinas-Kukkonen, Zhao, Enwald, Huotari, Ahola, Jämsä, Keinänen-Kiukaanniemi, Leppäluoto, Herzig

The Effect of Body Positions on Word-Recognition: A Multi-Methods NeuroIS Study
Chang, Pavlevchev, Flöck, Walla

The Relationships between Emotional States and Information Processing Strategies in IS Decision Support – A NeuroIS Approach
Mai, Kim

Improving Knowledge Acquisition from Informational Websites: A NeuroIS Study
Riaz, Gregor

Adaptation of Visual Attention: Effects of Information Presentation in Idea Selection Processes
Wibmer, Wiedmann, Seeber, Maier

FITradeoff Decision Support System: An Exploratory Study with Neuroscience Tools
Carneiro de Lima da Silva, Cabral Seixas Costa

17:00 End of the Retreat

VENUE

Schloss Wilhelminenberg, Savoyenstraße 2, 1160 Vienna, a small castle situated above Vienna, is the venue and main conference hotel.

DR. HERMANN ZEMLICKA AWARD

The NeuroIS community lost a visionary thinker. Dr. Hermann Zemlicka, who was an Austrian politician, member of the Gmunden City Council, and an entrepreneur, passed away at age 55 in June 2012. Dr. Hermann Zemlicka significantly contributed to the establishment of the NeuroIS Retreat. Without his visionary support, it would not have been possible to bring this conference into being. In memoriam of this outstanding person, the DR. HERMANN ZEMLICKA AWARD will be given to "the most visionary paper." The paper will be selected by the organizing committee (conference and program co-chairs).

2013 winner: Looking for Information Relevance in the Brain by Jacek Gwizdka, University of Texas at Austin, USA. 2014 winner: Designing Web Pages for Increased Content Familiarity: A Strategy 1 Study by Rob Gleasure, University College Cork, Ireland. 2015 winner: Neurophysiological Analysis of Visual Syntax in Design by Christopher J. Davis and Alan R. Hevner, University of South Florida, USA. 2016 winner: A Refined Examination of Worker Age and Stress: Explaining How, and Why, Older Workers Are Especially Techno-Stressed in the Interruption Age by Stefan Tams , HEC Montréal, Canada. 2017 winner: Using EEG Signal to Analyze IS Decision Making Cognitive Processes by Nabila Salma, Bin Mai, Kamesh Namuduri, Rasel Mamun, Yassir Hashem, Hassan Takabi, Natalie Parde, and Rodney Nielsen, University of North Texas, USA. 2018 winner: Using Gaze Behavior to Measure Cognitive Load by Lisa Perkhofer and Othmar Lehner, University of Applied Sciences Upper Austria and University of Oxford.

REGISTRATION DESK IN VIENNA

Schloss Wilhelminenberg, Savoyenstraße 2, 1160 Vienna
Registrants get their conference package here.

ORGANIZER

University of Applied Sciences Upper Austria
Forschungs & Entwicklungs GmbH
Franz-Fritsch Straße 11/3, 4600, Wels, Austria

ORGANIZING COMMITTEE

Conference Co-Chairs: Fred Davis and René Riedl

Program Co-Chairs: Jan vom Brocke, Pierre-Majorique Léger, and Adriane Randolph

Program Committee: Marc Adam, Bonnie Anderson, Ricardo Buettner, Colin Conrad, Alan Dennis, Rob Gleasure, Jacek Gwizdka, Armin Heinzl, Alan Hevner, Marco Hubert, Peter Kenning, Brock Kirwan, Ting-Peng Liang, Aleck Lin, Randall Minas, Gernot Müller-Putz, Fiona Nah, Aaron Newman, Ana Ortiz de Guinea, Sylvain Sénécal, Stefan Tams, Lars Taxén, Ofir Turel, Anthony Vance, Eric Walden, Robert West, Selina Wriessnegger.

LOGISTICS

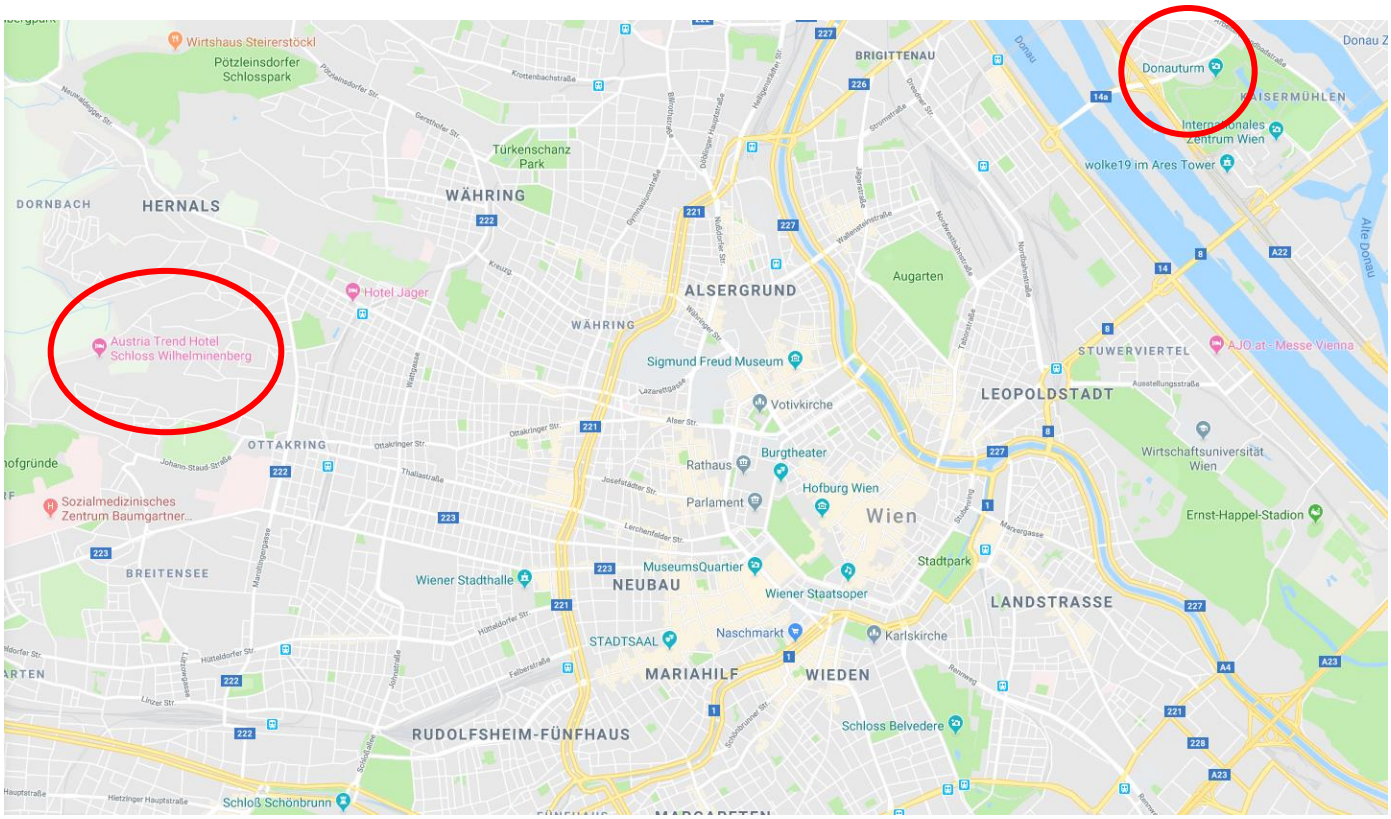
Participants are responsible for booking accommodation directly with the hotels. Please find a selection of hotels and guesthouses at http://www.neurois.org/hotels/. Ensure to have visas where necessary! All registration and cancellation details can be found at www.NeuroIS.org.

Supporting Institutions & Journals

Local Arrangement Chair: Prof. Dr. René Riedl. More information about NeuroIS: www.NeuroIS.org.

TRAVEL INFORMATION

In the map below you find the conference location (red circle – left) and the location of the social event on June 5 ("Danube Tower" or "Donauturm" in German, red circle – right) in reference to the city centre of Vienna ("Wien").



Going to the conference location…

By **plane** - from the airport "Wien - Schwechat":

(A) use a *rental car* to go to the location (several main providers are located at the airport); there is a sufficient number of parking slots in front of the venue or

(B) use *public transportation*: (1) take the train to go to Vienna (either S1 to go to "Wien Mitte" or any other train to go to "Wien Hauptbahnof"), (2) take the subway (at "Wien Mitte" the subway station "Landstraße" is located - from there take subway line U3 to go to "Ottakring"; at "Wien Hauptbahnof" the subway station "Hauptbahnof" is located - from here take subway line U1 to go to "Stephansplatz" and then change the line to U3 to go to "Ottakring"), (3) take the bus or a cab to the Schloss (after leaving the subway at "Ottakring" take bus 46A or 46B to go to Schloss Wilhelminenberg - or take a cab as you are now only about 3 km from the venue)

By **train** - from the train station "Wien - Hauptbahnhof" (= "main station"):

(1) take the subway (enter the subway station "Hauptbahnof" below the train station - from here take subway line U1 to go to "Stephansplatz" and then change the line to U3 to go to "Ottakring"), (2) take the bus or a cab to the Schloss (after leaving the subway at "Ottakring" take bus 46A or 46B to go to Schloss Wilhelminenberg - or take a cab as you are now only about 3 km from the venue)