

| Time Zone in Guadalajara, Jalisco, Mexico | | GMT-5 | | |
|---|-----------------------------------|--------------------------------------|-----------------------|--|
| Day | Activity | Location | Presentation modality | ID & Title |
| September 21 | | | | |
| 18:00 - 20:00 | WELCOME RECEPTION TOAST | Autonomous University of Guadalajara | | |
| September 22 | | | | |
| 8:00 - 8:20 | BICA 1 | Auditory | Talk | 32 Cognitive Architecture for Decision-Making Based on Brain Principles Programming |
| | AI 1 | Room | Talk | 37 An environment emulator for training a neural network model to solve the "Following the leader" task |
| 8:20 - 8:40 | BICA 1 | Auditory | Talk | 154 A Controlled Adaptive Network Model of a Virtual Coach Supporting Speaking Up by Healthcare Professionals to Optimise Patient Safety |
| | AI 1 | Room | Talk | 75 The BiLSTM-based (synthesized speech) deepfake voice recognition |
| 8:40 - 9:00 | BICA 1 | Auditory | Talk | 117 Formal representation of natural language elements in multi-agent system based of self-organization of distributed neurocognitive architectures |
| | AI 1 | Room | Talk | 80 AGI as a means of getting "truly" new knowledge using existing experience |
| 9:00 - 9:20 | BICA 2 | Auditory | Talk | 115 Multicriteria search for preferred configurations of modular robots for cargo transportation |
| | SEES 1 | Room | Talk | 2 A prototype system for supporting a network of information graphs with the ability to assess the nature of the subject's knowledge |
| 9:20 - 9:40 | BICA 2 | Auditory | Talk | 103 Stability and Similarity Detection for the Biologically-inspired Temporal Pooler Algorithms |
| | SEES 1 | Room | Talk | 12 Multilevel Organisational Learning in a Project-Based Organisation: Computational Analysis Based on a Third-Order Adaptive Network Model |
| 9:40 - 10:00 | BICA 2 | Auditory | Talk | 114 Towards the Construction of Computational Models of Emotions from the Perspective of a Software System |
| | SEES 1 | Room | Talk | 113 Semantic Web Technologies: Issues and Possible Ways of Development |
| 10:00 - 10:20 | BICA 3 | Auditory | Talk | 138 An Adaptive Network Model of the Role of the Microbiome-Gut-Brain Axis in Insomnia |
| | CS 1 | Room | Talk | 74 The concept of an intelligent data lake management system: machine consciousness and a universal data model |
| 10:20 - 10:40 | BICA 3 | Auditory | Talk | 48 BOLD signal changes in response to pseudowords after giving them semantic meaning in the course of special training: an fMRI study |
| | CS 1 | Room | Talk | 31 Learning a foreign language vocabulary with a companion robot |
| 10:40 - 11:00 | BICA 3 | Auditory | Talk | 45 The Navigation Map-Based Cognitive Architecture—A New Class of Artificial Intelligence |
| | CS 1 | Room | Talk | 85 Elements of semantic analysis based on lambda-calculus |
| 11:00 - 11:20 | AI 2 | Auditory | Talk | 141 Simulation of the structural and force parameters of a robotic platform using co-simulation |
| | SEES 2 | Room | Talk | 106 Adaptive Dynamical Systems Modelling of Transformational Organizational Change with Focus on Organizational Culture and Organizational Learning |
| 11:20 - 11:40 | AI 2 | Auditory | Talk | 90 Robust Classification of Contraband Substances using Longwave Hyperspectral Imaging and Full Precision and Neuromorphic Convolutional Neural Networks |
| | SEES 2 | Room | Talk | 97 Cyber-Neuro RT: Real-time Neuromorphic Cybersecurity |
| 11:40 - 12:00 | AI 2 | Auditory | Talk | 34 Training Multilingual and Adversarial Attack-Robust Models for Hate Detection on Social Media |
| | SEES 2 | Room | Invited Talk | 54 DEGARI 2.0: A Diversity-Seeking, Explainable, and Affective Art Recommender for Social Inclusion |
| 12:00 - 13:00 | DISCUSSION PANEL | Auditory | | |
| 13:00 - 14:00 | SPEAKER: YINGXU WANG | Auditory | Keynote speaker | AI vs. NI (Natural Intelligence): How will Brain-Inspired Systems Lead to Autonomous AI and Cognitive Computers? |
| 14:00 - 14:20 | NC1 | Auditory | Talk | 4 Modeling the effects of propranolol administration after fear memory reactivation by a second-order adaptive network model |
| 14:20 - 14:40 | NC1 | Auditory | Talk | 102 CogniDron-EEG: A system based on a brain-computer interface and a drone for cognitive training |
| 14:40 - 15:00 | NC1 | Auditory | Talk | 132 Inquiry of the orbitofrontal cortex role in incentive learning: An artificial neural networks simulation |
| 15:00 - 15:20 | CS 2 | Auditory | Talk | 40 A Second-Order Adaptive Mental Network Model Relating Dreaming to Creativity |
| 15:20 - 15:40 | CS 2 | Auditory | Talk | 91 Existence, Hypotheses and Categories in Knowledge Representation |
| 15:40 - 16:00 | BICA 3 | Auditory | Talk | 11 Adaptive Network Modeling of the Influence of Leadership and Communication on Learning within an Organization |
| September 23 | | | | |
| 8:00 - 8:20 | AI 3 | Auditory | Talk | 118 Indoor Evacuation Guidance System Based on AR Virtual Agent |
| | NC 2 | Room | Talk | 44 Modeling of placebo effect in stochastic reward tasks by reinforcement learning |
| 8:20 - 8:40 | AI 3 | Auditory | Talk | 83 On Hybrid Network Covert Channel Capacity |
| | NC 2 | Room | Talk | 149 An Adaptive Network Model for Aggregation and Prion-Like Propagation of α -synuclein in Parkinson's Disease |
| 8:40 - 9:00 | AI 3 | Auditory | Talk | 86 The applicative approach to the synthesis of a data structure with the given combinatory characteristic |
| | NC 2 | Room | Talk | 57 Association of structural changes of the brain with systemic immune activation in schizophrenia |
| 9:00 - 10:00 | SPEAKER: GARRICK ORCHARD (Intel) | Auditory | Keynote speaker | Efficient Bio-inspired Computing with Intel's Loihi 2 Neuromorphic Processor |
| | AI 4 | Auditory | Talk | 35 Neural Network Method for Determining The Direction of a Person's Gaze based on a Web Camera Image Analysis |
| 10:00 - 10:20 | SEES 3 | Room | Talk | 39 The Use of Virtual Reality Technologies in the Specialists' Training in the Field of Information Security |
| | AI 4 | Auditory | Talk | 5 A Second-Order Adaptive Network Model for Connecting Social Media Platforms and Users through Bonding by Faked Homophily |
| 10:20 - 10:40 | SEES 3 | Room | Talk | 79 On the accuracy of Covid-19 forecasting methods in Russia for two years |
| | AI 4 | Auditory | Talk | 111 The effect of friction on the positioning processes of intelligent executive devices (actuators) |
| 10:40 - 11:00 | SEES 3 | Room | Talk | 88 Lambda-calculus, combinators and applicative computational technologies |
| | AI 5 | Auditory | Talk | 25 The Structure of Associative Heterarchical Memory |
| 11:00 - 11:20 | SEES 4 | Room | Lightning Talk | 150 Establishing an Information Model for the «Philologist Automated Workplace» Concept for Launching and Implementing Cross-Disciplinary Research Projects at the Interface of Socio-Humanitarian and Technical Science |
| | AI 5 | Auditory | Talk | 121 Application of evolutionary PSO algorithms to the problem of optimization of 6-6 UPU mobility platform geometric parameters |
| 11:20 - 11:40 | SEES 4 | Room | Lightning Talk | 151 Methodological and Informational Support for Designing the «Philologist Automated Workplace» as an Element of Academic Ecosystem for Launching and Implementing Cross-Disciplinary Research Projects |
| | AI 5 | Auditory | Talk | 129 Low SWAP Reservoir Computer (RC) Hardware for Real-Time Wideband Signal Denoising and Anomaly Detection |
| 11:40 - 12:00 | SEES 4 | Room | Talk | 33 Implementation of value based curiosity mechanism in Reinforcement Learning algorithm based on A3C |
| | BICA SOCIETY PANEL | | | |
| 12:00 - 13:00 | CHAIR: ALEXEI SAMSONOVICH | Auditory | | |
| | SPEAKER: ANTONIE RANDAL MACINTOSH | Auditory | Keynote speaker | Keynote lecture: Modeling Network Function and Dysfunction with The Virtual Brain |
| 14:00 - 14:20 | BICA 4 | Auditory | Talk | 3 Bio-Inspired Cognitive Architecture of Episodic Memory |
| 14:20 - 14:40 | BICA 4 | Auditory | Talk | 59 Computational Framework of the Visual Sensory System Based on Neuroscientific Evidence of the Ventral Pathway |
| 14:40 - 15:00 | BICA 4 | Auditory | Talk | 81 Taste Perceptual Circuit for the Generation of Autonomous Responses in Virtual Creatures |
| 15:00 - 15:20 | BICA 5 | Auditory | Talk | 96 Visualization Tools for Monitoring and Debugging a Cognitive Architecture using CST |
| 15:20 - 15:40 | BICA 5 | Auditory | Talk | 125 A complete cognitive architecture as a services composition system inside a pervasive environment |
| 15:40 - 16:00 | BICA 5 | Auditory | Talk | 135 A bioinspired model for the generation of a motivational state from energy homeostasis |
| September 24 | | | | |
| 8:00 - 8:20 | AI 6 | Auditory | Talk | 115 Multicriteria search for preferred configurations of modular robots for cargo transportation |
| | SEES 5 | Auditory | Talk | 107 Conceptual hanger for displaced concepts: a framework for information processes variability |

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| 8:20 - 8:40 | AI 6 | Auditory | Talk | 116 Task-drive approach to artificial intelligence |
| | SEES 5 | Auditory | Talk | 119 Analysis of the Emotional Expression and User Experience of Virtual Agents in Smartphone-based AR |
| | AI 6 | Auditory | Talk | 156 The Symbol Grounding Problem in the system of general artificial intelligence based on multi-agent neurocognitive architecture |
| 8:40 - 9:00 | SEES 5 | Auditory | Talk | 139 An adaptive modelling approach to employee burnout in the context of the Big Five personality traits |
| | SPEAKER: ARMEN PISCHDOTCHIAN (IBM) | Auditory | Keynote speaker | Cross-roads of Machine Learning and Data Science. |
| 9:00 - 10:00 | NC 3 | Room | Talk | 109 On the possibility of ontology map constructing on the cerebral cortex. |
| | CS 3 | Room | Talk | 14 An Analogical Inductive Solution to the Grounding Problem |
| 10:00 - 10:20 | NC 3 | Room | Talk | 156 The Symbol Grounding Problem in the system of general artificial intelligence based on multi-agent neurocognitive architecture |
| | CS 3 | Room | Talk | 100 Constructing generator of words of context-dependent language on example of typed λ -calculus |
| 10:20 - 10:40 | NC 3 | Room | Talk | 46 The maze runner: navigating through basic kinetics to AI models of human metabolism pathology |
| | CS 3 | Room | Talk | 101 Analysis and comparison of generators of words of context-sensitive language on example of typed λ -calculus |
| | BICA 6 | Auditory | Talk | 53 Cognitive Mechanism of Temporal Transpective and Dynamics of Natural Cognitive Architectures Providing Speech Communication |
| 11:00 - 11:20 | CS 4 | Room | Talk | 120 Modelling Learning for a Better Safety Culture within an Organization using a Virtual Safety Coach: Reducing the Risk of Postpartum Depression via More Communication with Parents |
| | BICA 6 | Auditory | Talk | 161 TBA |
| 11:20 - 11:40 | CS 4 | Room | Talk | 130 The embodied elephant in the room |
| | BICA 6 | Auditory | Talk | 160 Automation of Configuration, Initialization and Deployment of Applications Based on an Algebraic Approach |
| 11:40 - 12:00 | CS 4 | Room | Talk | 162 Artificial Psychiatrist: An intelligent virtual/robotic assistant based on the eBICA framework and deep learning |
| | BICA 7 | Auditory | Talk | 87 Model of an autonomous agent forming its own simple knowledge base |
| 12:00 - 12:20 | AI 7 | Room | Talk | 93 Multimodal Mood Recognition for Assistive Scenarios |
| | BICA 7 | Auditory | Talk | 137 An Integrative Adaptive Network Model for Emotional Reactivity and Behavioural Inhibition by a Highly Sensitive Person |
| 12:20 - 12:40 | AI 7 | Room | Talk | 82 Layers, Folds, and Semi-Neuronal Information Processing |
| | BICA 7 | Auditory | Talk | 158 After 40 years of search for the promised land BICA*AI designers come to a point of disillusion and discord. Why? For what sins and misdeeds? |
| 12:40 - 13:00 | AI 7 | Room | Talk | 159 Multitasking learning in missing data recovery for the integration of geophysical methods in solving an inverse problem of exploration geophysics |
| 13:00 - 14:00 | SPEAKER: EMMANUEL ORTIZ LÓPEZ (Continental) | Auditory | Keynote speaker | Interpretability |
| 14:00 - 14:20 | SEES 6 | Auditory | Talk | 64 Modeling of a Cognitive Hybrid Architecture for the Hygrothermal Regulation of a Room Manipulated by an Agent |
| 14:20 - 14:40 | SEES 6 | Auditory | Invited Talk | 15 The Fourth Space in the Fourth Revolution |
| 14:40 - 15:00 | SEES 6 | Auditory | Invited Talk | 134 Human-robot attachment: A working framework based on human–dog relationships |
| 15:00 - 15:20 | BICA 8 | Auditory | Talk | 142 Cognitive Architecture Configuration Model for Performing Dynamic Pervasive Service Composition |
| 15:20 - 15:40 | BICA 8 | Auditory | Talk | 143 Computational model of the alerting function in attention. |
| 15:40 - 16:00 | BICA 8 | Auditory | Talk | 144 Proposal for a computational model of incentive memory |
| 16:00 - 16:30 | CONFERENCE | | | |
| | CONCLUDING REMARKS | Auditory | | |
| 18:00 CLOSING DINNER | | Santo Coyote Restaurant | | |