



THE BLUE SHRIMP

From the sea to your table, enjoy our open-air restaurant facing a beautiful lagoon with crocodiles, herons, turtles, iguanas, and much more.

Friday 8th, 7:00pm

Bvd. Nayarit 208 Jarretaderas Jarretaderas, 63735 Nuevo Vallarta, Nay.



Sail Away on a Catamaran Tour

Discover the beauty of Puerto Vallarta and the sparkling waters of Banderas Bay on an unforgettable catamaran adventure. Whether you're seeking relaxation, exploration, or a bit of both, this experience offers the perfect blend of comfort and excitement.

Enjoy the stunning coastal views, the gentle sea breeze, and an atmosphere of tranquility and elegance aboard a fully equipped luxury catamaran.

Saturday 9th, 4:00pm



Marina Vallarta
48335 Puerto Vallarta, Jal.



16th EDITION

BICA*AI

PUERTO 2025
VALLARTA MX

BIOLOGICALLY INSPIRED COGNITIVE ARCHITECTURES



August 6-10



CUCOSTA UNIVERSITY CENTER
Av. Universidad de Guadalajara 203
Ixtapa, Los Tamarindos, 48280
Puerto Vallarta, Jal
<https://www.bicaai.org/>

BICA PROGRAM

Cinvestav

Universidad de
Guadalajara

ORACLE

2025 Annual International Conference on Biologically Inspired Cognitive Architectures,
the 16th Annual Meeting of the BICA Society (BICA 2025), Puerto Vallarta, Mexico,
August 6 - 10

BICA-2025

PUERTO VALLARTA MX

ABOUT BICA

Biologically inspired cognitive architectures (BICA) are computational models of **artificial general intelligence** based on **biological systems**. They aim to replicate human-like adaptability and flexibility. Advances in cognitive science have led to rapid progress in BICA research, supporting intelligent applications such as **virtual agents**, **social robotics**, and **neuromorphic electronic applications**. The BICA Challenge seeks to replicate essential aspects of the human mind through interdisciplinary collaboration. Since its inception at DARPA and AAAI symposia, the **BICA Conference** has evolved into a global hybrid event renowned for its scientific rigor and inclusive atmosphere. It fosters innovation and international collaboration in **AGI**.

*Selected papers will be published in the **Studies in Computational Intelligence (SCI)** book series by Springer or in the **Q2-ranked journal Cognitive Systems Research (CSR)** by Elsevier.*

BIOLOGICALLY INSPIRED COGNITIVE ARCHITECTURES KEYNOTE SPEAKERS



Dr. Kugele

University: University of Memphis, USA

Speech: *BICAs for Science: Mental Imagery, Consciousness and the Nature of Thought*

Summary: Uses biologically inspired architectures to study mental imagery and aphantasia, analyzing how conscious and unconscious processes shape cognition.

**Aug 6
9:40 AM**

Prof. Vassilis G. Kaburlasos

University: International Hellenic University (IHU), Greece

Speech: *Human Friendly Artificial Intelligence enabled by the Lattice Computing Paradigm*

Summary: Introduces Lattice Computing as a semantic alternative to deep learning, enabling symbolic data handling and improving model flexibility and energy efficiency.



**Aug 7
9:00 AM**



Dr. Ricardo Gudwin

University: State University of Campinas, Brazil

Speech: *On the Pursuit of Understanding and Consciousness in Cognitive Architectures*

Summary: Explores how cognitive architectures can emulate human understanding, examine the role of consciousness and propose an ontology for building conscious artificial agents.

**Aug 8
9:00 AM**

Prof. Ron Sun

University: Rensselaer Polytechnic Institute, USA

Speech: *Rethinking Rationality and Intelligence in AI Through a Cognitive Architecture*

Summary: Discusses how cognitive architectures can reshape AI by addressing criticisms of rationality and intelligence through a neuro-symbolic approach.



**Aug 9
10:20 AM**



Cinvestav was established in 1961 as a public sector initiative to meet the growing demand for highly trained professionals and to promote research, education, and technological development. Today, it has five regional campuses, around **500 full-time researchers**, **1,500 graduate students**, and offers **43 postgraduate programs** across fields like exact sciences, biological and health sciences, engineering and technology, and social sciences.

Guadalajara Campus began in 1988 with the **Semiconductor Technology Center (CTS)**, focused on electronic component design. Initially sponsored by IBM Mexico and SECOFI, the center has served as a design hub for the electronics industry. In 1995, academic programs began with the Department of Electrical Engineering and Computer Science, offering master's and PhD degrees in areas such as computing, automatic control, electronic design, power systems, and telecommunications.

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