Collaborative Workshop UAG-UdeG, Mexico and BSC

Objectives

Universidad Autónoma de Guadalajara (UAG) and Universidad de Guadalajara (UdeG) are two well-known Mexican universities located in Guadalajara, 3rd most important city in the country and Mexican Silicon Valley (e.g., tech companies like Oracle, Intel, IBM and Motorola operate there). UAG and UdeG computer science programs are recognized by the Mexican Council of Science and Technology (CONACyT) as “international quality programs” and most of their students benefit from CONACyT financial support for conducting their studies and realizing up to 6 months internships abroad. Looking to consolidate their educational offer, we will receive the visit of a group of professors and students from both institutions, from 12-14th July, interested in discovering BSC-UPC research lines for establishing new academic and research collaborations.

This event is organised under the Severo Ochoa Program of Excelence in BSC and the attendance is by invitation only.

Academic Staff

Pablo Noriega B.V. (pablo@iiia.csic.es)
Tenured Scientist, IIIA-CSIC (Artificial Intelligence Research Center)
https://www.iiia.csic.es/staff/pablo-noriega

Research Interests:

- Open Regulated Multiagent Systems
- Agreement Technologies
- Social Intelligence

Guillaume Houzeaux (guillaume.houzeaux@bsc.es)

Physical and Numerical Modelling Group Manager
Guillaume Houzeaux
Research Interests:

- Respiratory system
- Multiphysics
- Computational fluid mechanics - Incompressible flows
- Alya - High Performance Computational Mechanics

Antonio J. Peña (antonio.pena@bsc.es)
NVIDIA GPU Center of Excellence Manager

Research Interests:

- Neural networks for data-streams
- Memory hierarchy for GPU acceleration
- Preemptive multiprogramming on GPUs
- Data Placement for Heterogeneous Memory Systems
- Message Passing Interface (MPI)

Vassil Alexandrov (vassil.alexandrov@bsc.es)
Extreme Computing Group Manager

Research Interests:

- Extremescale algorithms/scalable algorithms
- Extremescale visualization and simulation
- Extremescale mathematics

Judit Gimenez (judit@bsc.es)
Performance Tools Group Manager

Research Interests:

- Performance Analytics
- Data Placement for Heterogeneous Memory Systems

Vicenç Beltran Querol (vbeltran@bsc.es)
Researcher, Programming Models Group

Research Interests:

- Parallel Programming Models
- The OmpSs Programming Model
• Domain Specific Languages

Mauricio Hanzich (mauricio.hanzich@bsc.es)

_HPC Software Engineering Group Manager_

https://gateway.bsc.es:11003/hanzich-mauricio

Research Interests:

• HPC Geophysical Applications
• BSIT: Barcelona Subsurface Imaging Tools
• Electromagnetic Modeling and Inversion
• Atmospheric Impact Services
• Natural Language Processing

Maria Jose Rementeria Nuñez (maria.rementeria@bsc.es)

_Life Science Group, Social Link Analytics Team Leader_

Research Interests:

• Machine learning and deep learning techniques applied to industrial and scientific problems
• Big data visualization and analytics

Miquel Moreto (miquel.moreto@bsc.es)

_Researcher, Computer Architecture Group_

Research Interests:

• Runtime aware architectures
• Parallel programming models
• Critical real-time embedded system
• Power and temperature-aware OS

Adrián Cristal (adrian.cristal@bsc.es)

_Computer Arquitecture for Parallel Paradigms Group Manager_

https://gateway.bsc.es:11003/cristal-kestelman-adrian

Research Interests:

• Hardware Support for Big Data
• Resilient architecture and runtimes
• Improving Virtual Memory

Osman Unsal (osman.unsal@bsc.es)

_Computer architecture for parallel paradigms group manager_

https://gateway.bsc.es:11003/unsal-osman
Research Interests:

- Hardware Support for Big Data
- Resilient architecture and runtimes, fault tolerance
- Transactional memory
- FPGAs

**Petar Radojkovic** *(petar.radojkovic@bsc.es)*

*Memory systems team leader, Heterogeneous architectures Group*


Research Interests:

- Memory systems for HPC
- Detection and analysis of DRAM field errors
- Analysis of memory system requirements of HPC applications
- Simulation and evaluation of novel memory systems

**Isaac Rudomin** *(isaac.rudomin@bsc.es)*

*Crowd simulation team leader, Extreme Computing Group*

[https://sites.google.com/site/rudominisaac/](https://sites.google.com/site/rudominisaac/)

Research Interests:

- Computer Graphics
- Crowd Simulation, Generation, Animation, Visualization