

## ESWEEK 2026: Barcelo Sants hotel, Barcelona, Spain

| All times are Barcelona Time (CEST; GMT+2)                                                             |                                                                                                                 |                                                                                                                    |                                                                                                          |
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| Friday, October 2 - Education Classes                                                                  |                                                                                                                 |                                                                                                                    |                                                                                                          |
|                                                                                                        | Virtual                                                                                                         | Virtual                                                                                                            | Virtual                                                                                                  |
| 8:00 - 10:00 CEST<br>23:00 - 1:00 MST<br>7:00 - 9:00 BST<br>9:00 - 11:00 EEST<br>11:30 - 13:30 IST     | Education Class 1<br><b>Design and Analysis of Resilient Embedded Systems</b>                                   | Education Class 2<br><b>Architecting Domain-Tailored Computing Systems: Opportunities and Strategies</b>           | Education Class 3<br><b>System Level Data Formats and Representations for AI</b>                         |
| 13:00 - 15:00 CEST<br>4:00 - 6:00 MST<br>12:00 - 14:00 BST<br>14:00 - 16:00 EEST<br>16:30 - 18:30 IST  | Education Class 4<br><b>Designing Adaptive, Secure, and Sustainable Embedded Systems</b>                        | Education Class 5<br><b>Lazy by Design: Bioinspired Edge AI for Efficient, High-Performance, and Robust Vision</b> | Education Class 6<br><b>Reliability Challenges and Solutions for Modern AI and Emerging Accelerators</b> |
| 18:00 - 20:00 CEST<br>9:00 - 11:00 MST<br>17:00 - 19:00 BST<br>19:00 - 21:00 EEST<br>21:30 - 23:30 IST | Education Class 7<br><b>From Benchmarks to Bit-Flips: Systems View of Efficient and Reliable AI on the Edge</b> | Education Class 8<br><b>ML Compilation: Multi-Level IRs and Heterogeneous Targets</b>                              | Education Class 9<br><b>Hardware Security and Trust</b>                                                  |

| Sunday, October 4 - Tutorials |                                                                                                                |                                                                                                                          |                                                                                                                           |
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|                               | ROOM: MR05                                                                                                     | ROOM: MR06                                                                                                               | ROOM : MR07                                                                                                               |
| 09:00 - 10:30                 | <i>Tutorial 1</i><br><b>Accelerating Alpamayo 1 Inference via Architectural and System-Level Optimizations</b> | <i>Tutorial 2</i><br><b>From Application Development to Design-Space Exploration with CEDR for Heterogeneous Systems</b> | <i>Tutorial 3</i><br><b>Hardware-Aware Compilation for Analog, Digital, and Heterogeneous Computing-in-Memory Systems</b> |
| 10:30 - 11:00                 | Coffee Break (North Shuttle)                                                                                   |                                                                                                                          |                                                                                                                           |
| 11:00 - 12:30                 | <i>Tutorial 1</i><br><b>Accelerating Alpamayo 1 Inference via Architectural and System-Level Optimizations</b> | <i>Tutorial 2</i><br><b>From Application Development to Design-Space Exploration with CEDR for Heterogeneous Systems</b> | <i>Tutorial 3</i><br><b>Hardware-Aware Compilation for Analog, Digital, and Heterogeneous Computing-in-Memory Systems</b> |
| 12:30 - 13:30                 | Lunch Break (North Shuttle)                                                                                    |                                                                                                                          |                                                                                                                           |

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| 13:30 - 15:00 | <i>Tutorial 4</i><br><b>A Pragmatic Guide to Building Conservative Discrete Abstractions of Cyber-Physical Systems</b> | <i>Tutorial 5</i><br><b>Large-scale simulation of Quantum circuits using Tensor Networks</b> | <i>Tutorial 6</i><br><b>Octopus — An Open Framework for Prototyping and Validating Memory Solutions in Multicore Real-Time Systems</b> |
| 15:00 - 15:30 | Coffee Break (North Shuttle)                                                                                           |                                                                                              |                                                                                                                                        |
| 15:30 - 17:00 | <i>Tutorial 4</i><br><b>A Pragmatic Guide to Building Conservative Discrete Abstractions of Cyber-Physical Systems</b> | <i>Tutorial 5</i><br><b>Large-scale simulation of Quantum circuits using Tensor Networks</b> | <i>Tutorial 6</i><br><b>Octopus — An Open Framework for Prototyping and Validating Memory Solutions in Multicore Real-Time Systems</b> |
| 18:00 - 19:30 | Welcome Reception (North Shuttle)                                                                                      |                                                                                              |                                                                                                                                        |

| Monday, October 5 - Main Conferences, Day 1 |                                                                                                                                             |                                                                        |                                                                                           |                                                                                             |                                                    |
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| ROOM: MR10+11                               |                                                                                                                                             |                                                                        |                                                                                           |                                                                                             |                                                    |
| 08:30 - 09:00                               | Opening Session                                                                                                                             |                                                                        |                                                                                           |                                                                                             |                                                    |
| 09:00 - 10:00                               | KEYNOTE 1: "Agentic Design Automation for Embedded Systems: The Promise, the Peril, and the Proofs", Prof. Farinaz Koushanfar, UC San Diego |                                                                        |                                                                                           |                                                                                             |                                                    |
| 10:00 - 10:30                               | Coffee Break (North Shuttle + Orbital Shuttle)                                                                                              |                                                                        |                                                                                           |                                                                                             |                                                    |
|                                             | ROOM: MR05+06                                                                                                                               | ROOM: MR07+08                                                          | ROOM: MR12+13                                                                             | ROOM: MR14                                                                                  | ROOM: MR10+11 (front rows)                         |
| 10:30 - 12:00                               | Session 1, CODES<br><b>Speeding up LLMs with Sparsity, Quantization, and Speculation</b>                                                    | Session 1, CASES<br><b>Hardware Synthesis and Design Automation</b>    | Session 1, EMSOFT<br><b>Edge AI and Autonomous Driving</b>                                | Session 2, CODES<br><b>Emerging Threats and Defenses in Hardware Security</b>               |                                                    |
| 12:00 - 12:30                               | Poster Session (North Shuttle)                                                                                                              |                                                                        |                                                                                           |                                                                                             |                                                    |
| 12:30 - 13:30                               | Lunch Break (North Shuttle + Orbital Shuttle)                                                                                               |                                                                        |                                                                                           |                                                                                             |                                                    |
| 13:30 - 15:00                               | Session 3, CODES<br><b>Emerging Accelerator Architectures and Hardware-Algorithm Co-Design</b>                                              | Session 2, CASES<br><b>Efficient AI Processing and Acceleration</b>    | Session 2, EMSOFT<br><b>Formal Verification of Cyber-Physical and Hybrid Systems</b>      | Session 3, CASES<br><b>Storage and Persistent-Memory Systems</b>                            | <b>Embedded System Software Competition (ESSC)</b> |
| 15:00 - 15:30                               | Coffee Break & Poster Session (North Shuttle + Orbital Shuttle)                                                                             |                                                                        |                                                                                           |                                                                                             |                                                    |
| 15:30 - 17:00                               | Session 4, CODES<br><b>Compute-in-Memory for the Edge</b>                                                                                   | Session 4, CASES<br><b>Compilation, Optimization, and Verification</b> | Session 3, EMSOFT<br><b>Embedded Systems Performance, Energy, and Resource Management</b> | Session 4, EMSOFT<br><b>Verified Software, Model Extraction, and Formal Code Generation</b> | <b>Embedded System Software Competition (ESSC)</b> |
| 17:00 - 17:30                               | Poster Session (North Shuttle)                                                                                                              |                                                                        |                                                                                           |                                                                                             |                                                    |

| Tuesday, October 6 - Main Conferences, Day 2 |                                                                                |
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| ROOM: MR10+11                                |                                                                                |
| 08:30 - 09:00                                | Award Ceremony (Test of Time Awards and Society Awards)                        |
| 09:00 - 10:00                                | KEYNOTE 2: "Distributed Time-Sensitive Systems", Prof. Edward Lee, UC Berkeley |

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| 10:00 - 10:30 | Coffee Break (North Shuttle + Orbital Shuttle)                                                                                                               |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |
|               | ROOM: MR05+06                                                                                                                                                | ROOM: MR07+08                                                                                     | ROOM: MR12+13                                                                                                           | ROOM: MR14                                                                                                              | ROOM: MR10+11 (front rows)                                                                         |
| 10:30 - 12:00 | Session 5, CODES<br><b>Scalable and Resilient Storage Systems</b>                                                                                            | Session 5, CASES<br><b>Efficient LLM Systems and Architectures</b>                                | Session 5, EMSOFT<br><b>Real-Time Scheduling, Timing, and Control</b>                                                   | Session 6, CODES<br><b>Design and Optimization of Heterogeneous Computing Systems</b>                                   | <b>ACM SIGBED Student Research Competition (SRC)</b>                                               |
| 12:00 - 12:30 | Poster Session (North Shuttle)                                                                                                                               |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |
| 12:30 - 13:15 | Lunch Break (North Shuttle + Orbital Shuttle)                                                                                                                |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |
|               | ROOM: MR10+11                                                                                                                                                |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |
| 13:15 - 14:00 | IEEE CEDA LUNCHEON KEYNOTE: "The Age of AI – the Good, the Bad, and the Ugly", Dr. Hsien-Hsin Sean Lee, Intel                                                |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |
|               | ROOM: MR05+06                                                                                                                                                | ROOM: MR07+08                                                                                     | ROOM: MR12+13                                                                                                           | ROOM: MR14                                                                                                              | ROOM: MR10+11 (front rows)                                                                         |
| 14:00 - 15:30 | Session 7, CODES<br><b>Design Automation and Hardware Design with AIs</b>                                                                                    | Session 6, CASES<br><b>Data-Centric and Near-Memory Architectures</b>                             | Session 6, EMSOFT<br><b>Efficient AI Scheduling, Acceleration, and Hardware/Algorithm Co-Design</b>                     | Session 7, EMSOFT<br><b>Security, Resilience, and Robustness of CPS</b>                                                 |                                                                                                    |
| 15:30 - 16:00 | Coffee Break & Poster Session (North Shuttle + Orbital Shuttle)                                                                                              |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |
|               | A Special Afternoon of Discovery: Special Sessions                                                                                                           |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |
| 16:00 - 17:30 | Special Session 1, CODES<br><b>Chiplets at Scale: Overcoming Design, Security, Photonic and Thermal Challenges for Next-Generation Heterogeneous Systems</b> | Special Session 2, CASES<br><b>A Cross-Stack Approach to Efficient and Scalable Generative AI</b> | Special Session 3, EMSOFT<br><b>Making Time-Sensitive Networking Deployable: A Comprehensive Lifecycle Architecture</b> | Special Session 4, CODES<br><b>Neuromorphic and Analog Computing for AI-Driven Autonomous Laboratories and Robotics</b> | Special Session 5, CASES<br><b>Hardware-Software Co-Design of Quantum Machine Learning Systems</b> |
| 19:30 - 23:00 | Banquet – Drassanes Reials de Barcelona (Royal Shipyards of Barcelona)                                                                                       |                                                                                                   |                                                                                                                         |                                                                                                                         |                                                                                                    |

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| <b>Wednesday, October 7 - Main Conferences, Day 3</b> |                                                                                                                                       |                                                                   |                                                                                               |                                                                                                   |                                        |
|                                                       | ROOM: MR10+11                                                                                                                         |                                                                   |                                                                                               |                                                                                                   |                                        |
| 08:30 - 09:00                                         | Award Ceremony (Best Paper Awards, Competition Awards, and Society Awards)                                                            |                                                                   |                                                                                               |                                                                                                   |                                        |
| 09:00 - 10:00                                         | KEYNOTE 3: "Computing Without Looking Away: Embedded AI Architectures for Always-On Smart AR Glasses", Dr. Orlando Moreira, Snap Inc. |                                                                   |                                                                                               |                                                                                                   |                                        |
| 10:00 - 10:30                                         | Coffee Break (North Shuttle + Orbital Shuttle)                                                                                        |                                                                   |                                                                                               |                                                                                                   |                                        |
|                                                       | ROOM: MR05+06                                                                                                                         | ROOM: MR07+08                                                     | ROOM: MR12+13                                                                                 | ROOM: MR14                                                                                        | ROOM: MR10+11 (front rows)             |
| 10:30 - 12:00                                         | Session 8, CODES<br><b>Efficient and Adaptive Edge Sensing Systems</b>                                                                | Session 7, CASES<br><b>Security, Cryptography, and Resilience</b> | Session 8, EMSOFT<br><b>Distributed, Networked, and Coordinated Cyber-Physical Systems</b>    | Session 9, EMSOFT<br><b>Embedded Software, Storage, OS, and Verified Low-Level Implementation</b> |                                        |
| 12:00 - 12:30                                         | Poster Session (North Shuttle)                                                                                                        |                                                                   |                                                                                               |                                                                                                   |                                        |
| 12:30 - 13:30                                         | Lunch Break (North Shuttle + Orbital Shuttle)                                                                                         |                                                                   |                                                                                               |                                                                                                   |                                        |
| 13:30 - 15:00                                         | Session 9, CODES<br><b>Efficient and Robust AI Systems and Architectures</b>                                                          | Session 8, CASES<br><b>Emerging and Specialized Architectures</b> | Session 10, EMSOFT<br><b>Timing Semantics, Runtime Monitoring, and Specification Analysis</b> | Session 9, CASES<br><b>Adaptive Computing and System Optimization</b>                             | <b>PhD Forum and Recruitment Event</b> |

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| 15:00 - 15:30 | Coffee Break & Poster Session (North Shuttle + Orbital Shuttle)              |
|               | ROOM: MR10+11                                                                |
| 15:30 - 17:00 | PANEL: "Beyond the Prompt: Embedded Education and Research in the Age of AI" |
| 17:00 - 17:30 | Closing Session                                                              |

| Thursday, October 8 - Symposium and Workshops, Day 1 |              |            |            |              |              |
|------------------------------------------------------|--------------|------------|------------|--------------|--------------|
|                                                      | ROOM: MR01   | ROOM: MR02 | ROOM: MR03 | ROOM: MR04.1 | ROOM: MR04.2 |
| 09:00 - 10:30                                        | SDS          | NIPS       | RSP        | MEMOCODE     | TCRS         |
| 10:30 - 11:00                                        | Coffee Break |            |            |              |              |
| 11:00 - 12:30                                        | SDS          | NIPS       | RSP        | MEMOCODE     | TCRS         |
| 12:30 - 13:30                                        | Lunch Break  |            |            |              |              |
| 13:30 - 15:00                                        |              | NIPS       | RSP        | MEMOCODE     | TCRS         |
| 15:00 - 15:30                                        | Coffee Break |            |            |              |              |
| 15:30 - 17:00                                        |              | NIPS       | RSP        | MEMOCODE     | TCRS         |

| Friday, October 9 - Symposium and Workshops, Day 2 |              |            |            |              |              |
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|                                                    | ROOM: MR01   | ROOM: MR02 | ROOM: MR03 | ROOM: MR04.1 | ROOM: MR04.2 |
| 09:00 - 10:30                                      | WEEPQC       | CAIESA     | RSP        | MEMOCODE     | TCRS         |
| 10:30 - 11:00                                      | Coffee Break |            |            |              |              |
| 11:00 - 12:30                                      | WEEPQC       | CAIESA     | RSP        | MEMOCODE     | TCRS         |
| 12:30 - 13:30                                      | Lunch Break  |            |            |              |              |
| 13:30 - 15:00                                      | WEEPQC       | CAIESA     |            | MEMOCODE     |              |
| 15:00 - 15:30                                      | Coffee Break |            |            |              |              |
| 15:30 - 17:00                                      | WEEPQC       | CAIESA     |            |              |              |