embedUR systems Showcases Edge AI and ModelNova at Embedded World 2025

Edge AI applications on the latest AI chips from Leading Silicon Vendors

Silicon Valley, CA – embedUR systems, a leader in embedded systems and Edge AI innovation, has announced its participation at Embedded World 2025, set to take place from March 11-13, 2025, in Nuremberg, Germany.

At the event, embedUR systems will unveil more of its industry-leading Edge AI solutions, designed to deliver high performance on energy-efficient edge AI chips tailored for a variety of use cases. The demos highlight the benefits of using ModelNova, an advanced resource hub for accelerating AI development at the edge.

Pioneering AI on the latest Edge AI chips

embedUR systems is partnered with leading AI silicon vendors, including Synaptics, STMicroelectronics, Silicon Labs, NXP, and Infineon. At Embedded World 2025, embedUR will showcase the following live Edge AI demonstrations running across a selection of its partners' AI-native silicon platforms:

- **Image Segmentation**: Advanced image segmentation for real-time applications in industries such as automotive, agriculture, and infrastructure.
- **Facial Recognition**: High-precision, private, on-device or centrally managed systems enabling secure authentication for enterprises, public venues, and smart environments.
- **Audio Denoising**: AI-driven solutions for eliminating background noise in smart devices and industrial applications.
- **UWB Motion & Gesture Sensing**: AI-powered motion sensing for intuitive, touch-free interactions in automotive, consumer electronics, and industrial automation.
- **Wake Word & Object Detection for Smart Appliances**: Wake Word to start recipe processing and object detection for ingredient identification to enhance smart kitchen and retail appliances.

Each demonstration highlights the company's expertise in optimizing Edge AI performance on leading chipsets and platforms. By leveraging AI-enabled silicon from top providers, embedUR systems demonstrates their ability to integrate complex AI workloads seamlessly on energy-efficient AI chips from different vendors and showcasing their unmatched expertise and versatility in the field of Edge AI.

Each demo will be featured at embedUR's booth (Hall 4A-601) and at the respective partner's booth as well. In all, embedUR and its partners will have more than a dozen state-of-the-art Edge AI showcases spread around the show.

Introducing ModelNova: Accelerating AI Development at the Edge

A centerpiece of embedUR systems' exhibit at EW 2025 will be ModelNova, an advanced resource hub designed to eliminate barriers to Edge AI prototyping and deployment.

Key features of the platform include:

- **Pre-trained AI Models:** A robust library of over 50 models, optimized for small, power-efficient devices and ready for deployment.
- **Datasets:** Curated datasets which can be used by developers to retrain and refine AI models for novel edge use cases.
- **Blueprints:** Detailed roadmaps and resources offering developers a streamlined path from concept to prototype.

With ModelNova, developers can download a pre-trained model, such as an object detection model, integrate it into their application, and run it on a Raspberry Pi or AI silicon from one of embedUR's many semiconductor partners. This enables rapid proof-of-concept validation without the need for extensive investments in time or resources. Once the concept is validated, embedUR systems can provide bespoke embedded Edge AI services to further train, customize, and deploy models to meet the unique requirements of any production-grade application or hardware platform.

ModelNova empowers developers to turn their ideas into reality, accelerating innovation and reducing the complexity of Edge AI development.

Proven Expertise Across Platforms

embedUR systems' demonstrations underscore the company's ability to optimize AI performance regardless of the underlying silicon, reinforcing its position as a trusted partner for companies seeking to integrate Edge AI capabilities.

By showcasing solutions on diverse AI-enabled platforms, the company demonstrates how its services unlock the full potential of advanced chipsets, empowering customers to achieve scalable, high-performance AI solutions tailored to their needs.

embedUR systems' vision for ModelNova is to create the ultimate resource hub for accelerating AI development at the edge—a platform designed to simplify the journey from concept to deployment for developers worldwide.

Over the past year, the company has made significant strides toward this goal, expanding the platform's offerings to include a robust library of pre-trained AI models, curated datasets, and blueprints for real-world use cases. This progress reflects embedUR

systems' commitment as an Edge AI Foundation (leadership partner status) to delivering impactful solutions to the Edge AI developer community and furthering innovation in the Edge AI space.

"Embedded World is a global hub for innovation, and embedUR systems is excited to be part of this event in 2025," says Rajesh Subramaniam, CEO of embedUR systems. "With live demonstrations of our Edge AI capabilities and our ModelNova platform, we aim to inspire and connect with technology leaders seeking scalable, high-performance Edge AI technology for their products."

Join embedUR systems at Embedded World 2025

Embedded World 2025 is the premier global event for embedded systems and IoT professionals. Attendees visiting embedUR systems' booth located at Hall 4 / Booth 4-601 will gain insights into the company's pioneering work in Edge AI and the transformative potential of ModelNova.

This is a unique opportunity to witness firsthand how embedUR systems delivers scalable AI innovations across leading silicon platforms and helps businesses accelerate their journey to market.

For more information, visit **embedur.ai** and explore the ModelNova platform at **modelnova.ai**.

About embedUR systems

embedUR systems is a Silicon Valley-based leader in embedded solutions, AI, and Edge Computing. For over two decades, the company has specialized in accelerating product development for leading telecom, network equipment, and silicon vendors. With expertise in AI/ML, IoT, and networking, embedUR systems powers millions of devices worldwide, enabling next-generation intelligent systems. Learn more at **www.embedur.ai**.