

*NSF NANOSCALE SCIENCE AND ENGINEERING GRANTEES CONFERENCE:
NANO AND AI CONVERGENCE
DECEMBER 9-10, 2024*

***AI MEETS NANO: DRIVING BREAKTHROUGHS AND TRANSFORMING THE
FUTURE***

NEIL SAHOTA
CEO / Advisor
ACSI Labs / United Nations



Bio: Neil Sahota (萨冠军) is the CEO of ACSI Labs, United Nations (UN) AI Advisor, IBM Master Inventor, part-time Professor at UC Irvine, author of best seller, **Own the A.I. Revolution**, and contributing author of **Innovative Leadership & Followership in the Age of AI**. With 20+ years of business experience, he works with organizations to create their core business strategy, enter new markets, and develop next generation products/solutions powered by emerging technology. His work experience spans multiple industries including legal services, healthcare, life sciences, retail, travel and transportation, energy and utilities, automotive, telecommunications, media/communication, and government. Moreover, Neil is one of the few people selected for IBM's Corporate Service Corps leadership program that pairs leaders with NGOs to perform community-driven economic development projects. For his assignment, Neil lived and worked in Ningbo, China where he partnered with Chinese corporate CEOs to create a leadership development program.

In addition, Neil partners with entrepreneurs to define their products, establish their target markets, and structure their companies. He is a member of several investor groups like the Tech Coast Angels, advises venture capital funds like Miramar and CerraCap, and helped create the UN's Innovation Factory, a global program for social impact entrepreneurs. Neil also serves as a judge in various startup competitions and mentor in several incubator/accelerator programs.

He actively pursues social good and volunteers with nonprofits. Neil cofounded the UN's AI for Good Initiative and is actively helping them build out their ecosystem of strategic partnerships. He is currently helping the Zero Abuse Project prevent child sexual abuse as well as Planet Home to engage youth culture in sustainability initiatives. Over the last twelve years, he has served as a Board Director to several non-profit organizations such as the Inteleos and Computing for Humanity as well as corporate boards from around the world like Legalmaton, Lingmo, and Shineville.

Abstract: The fusion of artificial intelligence (AI) and nanotechnology is redefining the boundaries of scientific and industrial progress. This presentation explores how AI models, algorithms, and analytics are accelerating advancements in nanotechnology, enabling new discoveries, enhancing precision, and driving significant breakthroughs in material science and biomedicine. We will delve into case studies showcasing how AI optimizes the synthesis of nanomaterials, predicts molecular behavior, and simulates nanoscale interactions with unprecedented accuracy. Real-world examples will demonstrate the tangible benefits of AI integration, such as the development of smarter drug delivery systems, the creation of self-healing materials, and the advancement of ultra-efficient energy storage solutions.

Attendees will gain key insights into how AI is shortening R&D timelines, reducing costs, and overcoming challenges in nanotechnology research that were once insurmountable. By illustrating key outcomes—including increased efficiency, predictive capabilities, and improved scalability—this session will highlight the transformative potential of AI across the nanotech landscape. Researchers, innovators, and industry leaders will leave equipped with a deeper understanding of how AI is not just complementing but reshaping the future of nanotechnology.