JP Vasseur, PhD
NVIDIA Sr Distinguished Engineer & Chief Architect
jvasseur@nvidia.com , www.jpvasseur.me

Transformational Technology Leader

JP Vasseur is a pioneering force in the tech industry, known for his groundbreaking innovations spanning over 30 years. His career encompasses seminal contributions to core networking technologies such as the Path Computation Element (PCE), MPLS, and Traffic Engineering, as well as more than 15 years of leadership at the forefront of Machine Learning, Artificial Intelligence, and more recently Generative AI. His work has profoundly impacted the design of next-generation systems across Networking, High-Performance Computing (HPC), and large-scale AI Factories. By combining deep technical expertise with a visionary mindset, JP has helped shape the convergence of AI and infrastructure, driving transformative advances across multiple industries.

Since joining NVIDIA in 2024 as Sr Distinguished Engineer and Chief Architect AI and Networking, JP has been leading strategic initiatives at the intersection of Artificial Intelligence, Machine Learning, and Networking. He currently drives the architecture of next-generation ML and Generative AI systems designed to dramatically improve data center performance, resource optimization, and service availability. His recent work focuses on building Robotic Data Centers powered by agentic AI systems capable of autonomous issue detection, root cause analysis, and automated remediation — enabling infrastructure to operate with minimal human intervention. He also works on predictive analytics, developing novel anomaly detection techniques to proactively prevent performance degradation. In parallel, he is exploring optimization strategies for large-scale training and inference in LLMs, while defining industry benchmarks and methodologies for evaluating ML and GenAI performance in highly distributed environments.

Prior to NVIDIA, JP served as Cisco Fellow and AI Vice President of Engineering for over 13 years, where he played a central role in the development of AI-driven solutions across domains such as Wireless, IoT, SD-WAN, Device Classification, Security, and Multi-Domain Networking. These efforts culminated in the creation of four large-scale commercial products that are now deployed globally across a wide range of industry sectors. Before this AI-focused phase, JP spent 12 years at Cisco leading a number of foundational networking initiatives, including the design and standardization of Traffic Engineering, advanced Routing architectures, and early work on the Internet of Things (IoT), contributing to Cisco’s leadership in next-generation network infrastructure.

With a portfolio of more than 750 patents across networking and AI domains (ranked #82 most prolific inventor of all time), JP's expertise is widely recognized in both industrial and academic circles. He is a frequent keynote speaker at international conferences and collaborates regularly with top research institutions.

JP's academic background includes a PhD in Computer Science, and he has published extensively in peer-reviewed journals and conferences. He is also the co-author of several widely acclaimed technical books, including *Network Recovery*, *Definitive MPLS Network Designs*, and *Interconnecting Smart Objects with IP: The Next Internet*. In addition to his academic and industrial research contributions, JP regularly publishes visionary articles on the future of Networking, Artificial Intelligence, and Neuroscience on his personal website: www.jpvasseur.me. His enduring commitment to scientific rigor and technological innovation continues to inspire engineers, researchers, and technologists worldwide.