About Me

Dr. Avinash Kumar Singh is a seasoned AI professional with over 14 years of expertise in artificial intelligence, specializing in Generative AI, machine learning (ML), computer vision (CV), and natural language processing (NLP). A recognized corporate trainer and AI consultant, he empowers organizations and individuals to harness the full potential of AI. As the founder of Robaita (a Robotics and Artificial Intelligence Training Academy), he drives AI adoption across industries, helping companies resolve challenges and individuals carve out successful careers in AI. Dr. Singh has guided leading companies such as Highradius, AES Group, NeuSix, Brane Technologies, and Intain in establishing cutting-edge R&D divisions for artificial intelligence. 

As the Global Solution Leader of AI at Brane Enterprises LLP, Dr. Singh spearheaded the development of revolutionary products, such as Smart Glasses for visually impaired individuals. This system empowers the blind with capabilities like reading, navigating, and recognizing scenes and images. Supported by a powerful 10K image understanding model, the system can classify 10,000 categories. He also led the development of a large-scale facial recognition system for identification and authentication, as well as a Driver Monitoring System (DMS) that utilizes AI to track real-time driver behavior, cutting driving violations by 40%. These innovations highlight his expertise in driving AI solutions that enhance operational performance and improve quality of life.

At Montpellier University, France, as a Senior Researcher, Dr. Singh played a pivotal role in the Horizon 2020, EU Project SOPHIA, designing a sensor-agnostic, Bidirectional LSTM-based deep neural network for action recognition. Integrated with KUKA robots, this model advanced human-robot collaboration in industrial applications. His groundbreaking research has been presented at prestigious conferences, bridging the gap between cutting-edge AI research and real-world implementations.

During his postdoctoral research at Umea University, Sweden, Dr. Singh developed a dialogue-based human-robot interaction system and a robot collaboration framework for humanoid robot ‘Pepper’. His work garnered widespread recognition for its contribution to designing AI systems that enable seamless, natural communication between humans and robots.

Dr. Singh's expertise extends to designing large-scale AI systems requiring real-time responses, zero downtime, and continuous availability. He has deployed AI systems in different cloud environments such as AWS, GCP, and E2E. His mastery in pruning and quantizing ML models for deployment on edge devices like Jetson Nano, Raspberry Pi, and NXP 93 boards further demonstrates his ability to optimize AI models for high performance in resource-limited environments. This skill is vital for training AI professionals to create scalable and efficient AI solutions in practical applications.

Through his career, Dr. Singh has relentlessly pushed the boundaries of AI and robotics, making an indelible impact on the organizations and projects he leads. His visionary leadership and technical expertise have established him as a highly sought-after authority in AI training and deployment.