**"AI-Based Video Analytics"**

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**Abstract**

In this talk, we will present and discuss the current trends and research in video analytics. Surveillance cameras have been widely installed worldwide. Although the primary purpose of those cameras is for monitoring, the most essential task is to be able to analyze video content and extract useful information. Artificial intelligence (AI) and deep learning-based computer vision techniques utilizing multi-layer neural networks drastically improve the performance of video analytics to a certain extent. Several ongoing types of research on deep learning-based video analytics, such as image super-resolution, real-time multiple face recognition systems, video anomaly detection, and several implementations of embedded video analytic systems on FPGA and Single Board Computers, will be discussed. Some cases of video analytics will also be mentioned.

**Biography**

**Assoc. Prof. Dr. Supavadee Aramvith** received a B.S. (first class honors) degree in Computer Science from Mahidol University in 1993. She received her M.S. and Ph.D. in Electrical Engineering from the University of Washington, Seattle, USA, in 1996 and 2001, respectively. She joined Chulalongkorn University in June 2001. She is an associate professor at the Department of Electrical Engineering specializing in video technology.

She has successfully advised 14 Ph.D., 30 Master's, and 41 Bachelor's Graduates. She published over 150 papers in International Conference Proceedings and Journals with 4 International Book Chapters. She has rich project management experience as the project leader and former technical committee chair for Thailand's government bodies in telecommunications and ICT.

She is very active in the international arena, having leadership positions in IEEE and NICT ASEAN IVO. She serves as the IEEE Thailand Section Chair, the IEEE Product Safety Engineering Society Board of Governors, the IEEE-HKN Regions 7-10 Governor, the IEEE MGA Chapter Operations Support Committee Chair, and the IEEE Ethics and Member Conduct Committee.