

# Artificial Intelligence & Machine Learning

November 17-18, 2025 | London, UK



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## **E-life around us in Bangkok, Thailand Semi-Markov Models for Process Mining in Smart Homes**

Bangkok, a city renowned for its vibrant energy, rapid urbanization, and growing tech-savvy population, presents an ideal environment for the adoption of smart home technology. The city's property market is increasingly embracing automated systems, driven by a desire for enhanced security, greater convenience, and improved energy efficiency. Developers are positioning smart features as a key differentiator, while consumers are captivated by the promise of a more connected and comfortable lifestyle.

The smart home is one of the emerging trends in Bangkok that aims to enhance the comfort of its residents. Let's consider the Semi-Markov models; this system would analyze event logs to identify patterns and anomalies. For instance, it could detect if someone is spending significantly longer time in the restroom than the usual data collected from daily restroom usage. By analyzing these patterns, the system can provide valuable actions to the resident, helping them in case of a fall, fainting, or becoming unconscious in the restroom, requiring immediate medical assistance. The Semi-Markov smart home could automatically connect with the hospital or inform the ambulance to provide immediate treatment to the homeowner.

But what if the smart home developer goes even further by connecting their SMM smart home with a super smartwatch certified with clinical grade used that indicates precise neurotransmitter signaling measurements in our bodies, for example, the crucial lower level of certain hormones such as Serotonin, which could perhaps trigger depression and negative actions and lead to regrettable incidences. With the connection of this clinical-grade smartwatch and the IoT of the Semi-Markov Models smart home, the smart watch could generate a warning signal when the lowering hormone occurred and results in a sudden mood change. The smart home system could then automatically contact the homeowner's doctor to provide appropriate treatment actions based on the severity of the lowering hormone.

In summary, the Semi-Markov Models smart home together with the clinical proven smart wearable gadgets such as the clinical grade certified smartwatches could potentially save the life of the homeowner, especially in today's society where there is an increasing aging population that may find it challenging to travel and stay home frequently.

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## Biography

As a highly accomplished and results-driven technical leader with a Ph.D. in Management in Information Technology, my background is uniquely defined by:

-AIML and system integration: Extensive academic knowledge complimented by practical expertise in integration systems with AIML for managing, securing and deploying complex ISR situations with the resilient communication and autonomous systems.

-Specialized Knowledge: Deep managerial knowledge spanning advanced telecommunication network optimization, information management and cutting-edge data management.

-High-Impact Contributions : Specific focus on applying AIML to enhance mission capabilities in sensitive areas and demanding areas, including the various kinds of Unmanned autonomous vehicles UAVs. This involves managing and integrating the specific maintenance models, enhancing AIML to illustrate the real-time situational awareness for command and control center(2C) through novel advanced level of radar and sensor fusion and maintaining the robust secure communication protocols into all of these elements.

I am positioned to deliver this powerful blend of management mastery and strategic IT expertise to lead high-stakes missions and development projects for Sea-Air-Space domains across the globe.

My goal is to drive strategic technological transformation and successfully integrate next-generation autonomous and intelligence system into critical operational frameworks.