

BIOGRAPHY

Mr. Thanarat Phimtakbong was born in Nakhon Ratchasima, Thailand, in 2000. He received his Bachelor of Engineering degree in Electrical Engineering from Suranaree University of Technology in 2023. After graduation, he pursued his Master of Engineering in Electrical Engineering at the School of Electrical Engineering, Suranaree University of Technology.

During his graduate studies, his research focused on the improvement of voltage deviation in active distribution networks through the use of optimal voltage droop control with battery energy storage systems (BESS). His thesis integrates advanced optimization techniques, including Particle Swarm Optimization (PSO) and Fuzzy Multi-Objective Optimization (FMOO), to enhance voltage regulation and system stability under high renewable energy penetration.

In addition to his research work, Mr. Thanarat served as a teaching assistant for the undergraduate course Electric Circuits, where he supported laboratory sessions and assisted students in problem-solving. In 2024, he presented his research findings at the International Electrical Engineering Congress (IEECON 2024), gaining experience in academic communication and professional networking.

His academic interests include power system stability, energy storage integration, voltage control strategies, and the application of intelligent algorithms in electrical engineering.

Throughout his study, Mr. Thanarat has demonstrated strong analytical skills, effective communication, and a dedication to research in power system enhancement, with the goal of contributing to the development of more reliable and efficient smart grids.