

Name	TRAN Thanh Phong		
Position	Lecturer, Department of Physics and Computer Science		
Academic career		<i>Institution</i>	<i>Year</i>
	Postdoc	University of Technology, VNUHCM	2025
	Doctoral degree	Ton Duc Thang University	2024
	Master degree	International University, VNUHCM	2008
	Undergraduate/bachelor degree	University of Science, VNUHCM	2003
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	Lecturer	Faculty of Physics - Engineering Physics	08/2025-present
Research and development projects over the last 5 years	<i>Name of project or research focus</i>	<i>Body funding</i>	<i>Role/ Period</i>
	Developing a Preservation Process for Fresh Medicinal Roots (Ngoc Linh Ginseng) in Kon Tum Province	Kon Tum Province	2020-2023
	Application of artificial intelligence-based methods for Microgrid management and operation	Type B Research Project VNUHCM	Ongoing research project
	Automatic generation control in multi-area power systems using intelligent computing-based SMC controllers	Type C Research Project VNUHCM	Ongoing research project
Industry collaborations over the last 5 years	<i>Project title</i>		<i>Partners</i>
	Climate Change Displacement and the Right to Education		NU IAS, Canada
Patents and proprietary rights	<i>Title</i>		<i>Year</i>
	Apparatus and method of quantum metrology using contextuality of measurement selection		2023 (Korea)
Important publications	None		

over the last 5 years			
Activities in specialist bodies over the last 5 years	<i>Organisation</i>	<i>Role</i>	<i>Period</i>
	1. Huynh-Van, Van, and Phong Tran-Thanh* , Discrete sliding mode control design for piezoelectric actuator, Journal of Advanced Engineering and Computation, 2588-123X, 2019.		
	2. Huynh, Van Van, Phong Thanh Tran* , Bui Le Ngoc Minh, Anh Tuan Tran, Dao Huy Tuan, Tam Minh Nguyen, and Phan-Tu Vu, New second-order sliding mode control design for load frequency control of a power system, New second-order sliding mode control design for load frequency control of a power system, 6509, 2020.		
	3. Van Huynh, Van, Phong Thanh Tran , Tuan Anh Tran, Dao Huy Tuan, and Van-Duc Phan, Extended state observer-based load frequency controller for three area interconnected power system, TELKOMNIKA (Telecommunication Computing Electronics and Control, 1001, 2021.		
	4. Huynh, Van Van, Bui Le Ngoc Minh, Emmanuel Nduka Amaefule, Anh-Tuan Tran, and Phong Thanh Tran , Highly robust observer sliding mode based frequency control for multi area power systems with renewable power plants., Electronics, 2021.		
	5. Tran, Anh-Tuan, Bui Le Ngoc Minh, Van Van Huynh, Phong Thanh Tran , Emmanuel Nduka Amaefule, Van-Duc Phan, and Tam Minh Nguyen, Load frequency regulator in interconnected power system using second-order sliding mode control combined with state estimator, Energies, 2021.		
	6. Tran, Anh-Tuan, Bui Le Ngoc Minh, Phong Thanh Tran , Van Van Huynh, Van-Duc Phan, Viet-Thanh Pham, and Tam Minh Nguyen, Adaptive integral second order sliding mode control design for load frequency control of large scale power system with communication delays, Complexity, 2021.		
	7. Huynh, Van Van, Bui Le Ngoc Minh, Emmanuel Nduka Amaefule, Anh-Tuan Tran, Phong Thanh Tran , Van-Duc Phan, Viet-Thanh Pham, and Tam Minh Nguyen, Load frequency control for multi-area power plants with integrated wind resources, Applied Sciences, 2021.		
	8. Tran, Anh-Tuan, Phong Thanh Tran* , and Van Van Huynh., Load Frequency Control for Power System using Generalized Extended State Observer, Journal of Advanced Engineering and Computation, Không, 2021.		
	9. Lai, Hoan Bao, Anh-Tuan Tran, Van Huynh, Emmanuel Nduka Amaefule, Phong Thanh Tran , and Van-Duc Phan, Optimal linear quadratic Gaussian control-based frequency regulation with communication delays in power system, International Journal of Electrical & Computer Engineering, 2088-8708, 2022.		
	10. Huynh, Van Van, Phong Thanh Tran* , Tien Minh Nguyen, Van-Duc Phan, and Viet-Thanh Pham, Advanced sliding mode observer design for load frequency control of multiarea multisource power systems, International Transactions on Electrical Energy Systems, 2022.		
	11. Van Huynh, Van, Phong Thanh Tran* , Chau Si Thien Dong, Bach Dinh Hoang, and Okyay Kaynak., Sliding surface design for sliding mode load		

	frequency control of multiarea multisource power system, IEEE Transactions on Industrial Informatics, 2024. 12. Phong Thanh Tran, Van Van Huynh, Chau Si Thien Dong, and Bach Hoang Dinh., Automatic Generation Control Based Sliding Mode Observer Design for Multiarea Multi- source Power Systems, In International Conference on Advanced Engineering Theory and Applications, pp. 27-39. Singapore: Springer Nature Singapore, 2024. 13. Phong Thanh Tran, Van Van Huynh, Chau Thien Si Dong, and Bach Hoang Dinh, Sliding Mode-Based Load Frequency Control of a Power System with Multi-Source Power Generation., In 2023 International Conference on System Science and Engineering (ICSSE). 14. Phong Thanh Tran, Pham Thi Thu Hien, and Thanh-Qua Nguyen, Robust Control Design of a Novel PSO based PID Controller for Cardiac Pacemaker System, In The 10th International Conference in Vietnam on the Development of Biomedical Engineering (BME10), 2024. 15. Phong Thanh Tran, Cuong Huy Huynh, and Thanh Binh Doan, The Impact of Time Delay on Power System: Optimized Integral Sliding-Mode Control Algorithm with Disturbances, In 2024 International Conference on Advanced Technologies for Communications (ATC), pp. 803-808. IEEE, 2024.
Website	https://phys.hcmus.edu.vn/