

Wasuthorn Ausrivong

Thailand: 12 Rama 2, Samaedum, Bangkuntien, Bangkok 10150, Thailand
Japan: 560-0032, Toyonaka Shi, Hotarugaike, Higashimachi 4-5-4, Room 402
Phone: (+66) 62-245-1591, (+81) 70-8995-8347.
Email: wonnerbcc163@gmail.com,



EDUCATION

**Graduate School of Engineering Science,
Osaka University**

**Osaka, Japan
October 1, 2025 - Now**

Master's degree, Department of Systems Innovation,
Division of Systems Science and Applied Informatics, Area of System Theory.
Robot Mechanics Group.

**Institute of Field Robotics,
King Mongkut's University of Technology Thonburi**

**Bangkok, Thailand
August 7, 2020**

Bachelor of Robotics and Automation Engineering ([link](#)), GPA: 3.46 ([link](#))

(Second-class honors, ranked 9th in the class of the year),

Senior Project Topic: Learning to Adjust Locomotion for Damaging Walking Robot

Bangkok Christian College

**Bangkok, Thailand
2015**

High School Diploma (Math and Science Program), GPA: 3.43

RESEARCH AREAS

Climbing Robots • Industrial Inspection Robotics • Autonomous Locomotion • Bio-inspired Robotics

SKILLS

- **Programming & Software:** C++ • C • Python • SolidWorks • ROS • Arduino • SQL • Git • Linux (Ubuntu) • MATLAB.
- **Research & Innovation:** Experimental Robotics • Scientific Writing • Data Analysis • Technology Transfer • Patent Development.
- **Industrial Applications:** Inspection Robotics • Magnetic Wall-Climbing Robots • Furnace Cleaning Robots • Non-Destructive Testing (VT, MT).
- **Professional Skills:** Proposal Development • Budget Management • Technical Leadership • Project Management • Cross-functional Collaboration • Technical Presentation • Engineering Research Mentorship

Language Skills

- Thai: Excellent (Native Speaker)
- English: IELTS Overall Band score: 6.0, CEFR Level: B2. [link](#)

ACTIVITIES

- AI and Robotics innovation Contest Hackathon (AIROBIC 2018)
- Global Project Based Learning 2017(GPBL)
- SCG Innovation Challenge 2016

SCHOLARSHIP

- Japanese Government (Monbukagakusho, MEXT) Scholarship, Master's degree, The Graduate School of Engineering Science, Osaka University (2025) [link](#)
- Students Internship for Overseas Research Collaboration scholarship given by Institute of Field Robotics to students doing the internship and research aboard (2019) [link](#)
- Delta Internship 2019 awarded by Delta Electronics company to students with outstanding research topic (2019) [link](#)
- Enhancing Student Mobility scholarship given by the International Affairs office of King Mongkut's University of Technology Thonburi to students doing the internship and research aboard (2019)
- Academic Excellence Scholarship awarded by the Institute of Field Robotics to students ranked in the top 5 of the semester (2016)

WORK EXPERIENCE

Senior Robotics Research Engineer	Vidyasirimedhi Institute of Science and Technology (VISTEC), School of Information Science and Technology (IST), Thailand	JUL 2021 – SEP 2025
	• Efficiency Improvement through Fired Heater/Furnace Cleaning (REFINE project), link • Advanced Hybrid Legged-Wheeled Robot for Internal Vessel Inspection (HERO project), link • Advanced Pipe Inspection Robot System (AVIS project), link	
Business Analyst (IT)	Kasikorn Business Technology Group (KBTG), Thailand	AUG 2020 – JUN 2021
Teacher Assistant (TA)	Institute of Field Robotics (FIBO), King Mongkut's University of Technology Thonburi (KMUTT), Thailand	AUG 2019 – JAN 2020
	• Basic Control Theory and Intro To Robotics subjects.	
Internship	The NEUTRON Laboratory, Nanjing University of Aeronautics and Astronautics, China.	JUL 2019 - AUG 2019

LEADERSHIP

2016 - 2020	Board member of FIBO Student Association	FIBO
	› Served as an Election Commissioner for the FIBO Student Association in 2016 and 2017	
2015 - 2020	Class President, Field Robotics and Automation Bachelor's Degree (FRAB #3)	FIBO
	› Vice-president of <i>FIBO ROBOCAMP 6</i> and <i>FIBOLIAN Camp</i> in 2017 and 2018	

PATENT

- Manoonpong, P., Terapongnivat, K., Janna, R., Nantareekurn, W., Ausrivong, W., Srisuchinnawong, A., Pewkliang, S. ***Wheel-legged Robot***, Innovation Patent, PCT International Application No. PCT/IB2025/056485, Filing Date: 26 June 2025. ([link](#))
- Manoonpong, P., Srisuchinnawong, A., Phongaksorn, K., Ausrivong, W., Kosanant, P., Kasemwarapach, T. ***A Method and System for Controlling Motion of a Climbing Robot***, Innovation Patent, PCT International Application No. PCT/IB2021/060011, Filing Date: 29 October 2021. ([link](#))

PUBLICATION

2026	W. Ausrivong, S. Tadokoro, K. Oguma, Y. Okada, K. Ohno, S. Miyake, K. Abe, M. Watanabe, K. Tadakuma. <i>"Magnetic Spherical Omnidirectional Wheel Mechanism"</i> . Robotics and Mechatronics Conference 2026 (ROBOMECH2026), Fukuoka, Japan, 2026. video , link .	Conference
2026	Wasuthorn Ausrivong, Masahiro Watanabe, Kenjiro Tadakuma. <i>"Development of an Omnidirectional Magnetic Climbing Robot for Thin Ferrous and Non-Ferrous Surfaces"</i> . Robotics and Mechatronics Conference 2026 (ROBOMECH2026), Fukuoka, Japan, 2026. video , link .	Conference
2026	Wasuthorn Ausrivong, Arthicha Srisuchinnawong, and Poramate Manoonpong. <i>"Inchworm-inspired Adaptive Multimodal Neural Control for an Autonomous Inspection Robot"</i> . 2026 IEEE International Conference on Robotics & Automation (ICRA), Vienna, Austria, 2026. video1 , video2 , poster , graphical abstract , slides .	Conference
2025	Sanpoom Punapanont, Thipawan Pairam, Wasuthorn Ausrivong and Poramate Manoonpong, <i>"REFINE-bot: Furnace Cleaning Robot for Heat-transfer Efficiency Improvement,"</i> 2025 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Hangzhou, China, 2025, pp. 15641-15648, doi: 10.1109/IROS60139.2025.11247011. link , video , poster , graphical abstract , slides .	Conference
2023	Arthicha Srisuchinnawong, Kitti Phongaksorn, Wasuthorn Ausrivong, and Poramate Manoonpong. (2023) <i>Adaptive Bipedal Robot Walking on Industrial Pipes under Neural Multimodal Locomotion Control: Toward Robotic Out-pipe Inspection</i> . IEEE/ASME Transactions on Mechatronics. DOT: 10.1109/TMECH.2023.3293950. link , video	Journal Article
2023	Kanut Tarapongnivat, Run Janna, Worameth Nantareekurn, Wasuthorn Ausrivong, Arthicha Srisuchinnawong, Naris Asawalertsak, Suppachai Pewkliang, and Poramate Manoonpong. (2023) <i>Hybrid Omnidirectional Wheeled Climbing Robot with an Electromagnet for Inspection</i> , the 26th issue of the International Conference Series on Climbing and Walking Robots and the Support Technologies for Mobile Machines (CLAWAR). link	Conference

2023 Thirawat Chuthong, Wasuthorn Ausrivong, Binggwong Leung, Jettanan Standalone
Homchanthanakul, Nopparada Mingchinda, Poramate Manoonpong. “**Nature Inspired** Videos
Machine Intelligence from Animals to Robots”. Standalone Videos presented at the
2023 IEEE International Conference on Robotics and Automation (ICRA). [video](#)

PROJECTS

Jan 2024 – Dec 2025	Efficiency ImpRovEment through FIred Heater/FurNace CIEaning (REFINE project)	VISTEC
	› Senior Robotics Research Engineer, Project website: link .	
Jan 2023 – Dec 2025	Advanced Hybrid Legged-Wheeled Robot for Internal Vessel Inspection (HERO project)	VISTEC
	› Senior Robotics Research Engineer, Project website: link .	
Jul 2021 – Dec 2025	AdVanced Pipe Inspection Robot System (AVIS project)	VISTEC
	› Robotics Research Engineer, Project website: link .	
Jan – May 2019	Learning to Adjust Locomotion for Damaged Walking Robot (Senior-Thesis)	FIBO
	› Developed and implemented a Model-based Meta-Reinforcement Learning algorithm to adapt locomotion behavior when the robot's legs were damaged.	
	› Researched and evaluated the capabilities of the new behavior using the Mujoco physics engine simulation in Linux environments.	
	› Slide: link .	
Aug – Dec 2019	Manufacturing and Automation Class Project	FIBO
	› Designed and implemented communication between a computer and a Programmable Logic Controller (PLC) for the UR5 robotic arm in real robot applications, including preliminary simulations for overall process automation.	
Jun – Jul 2019	Q-learning for Walking Robot (Internship)	Neutron Laboratory at Nanjing University of Aeronautics and Astronautics
	› Designed and implemented a Q-learning algorithm for Lilibot (a 4-legged robot) to enable walking behavior in simulation using the ROS framework and V-REP simulation in Linux environments.	
	› Slide: link .	
Jan – May 2019	Parcel Handling Robot with Palletizing Robot	FIBO
	› Developed and implemented Forward and Inverse Kinematics, Forward and Inverse Dynamics, and robot control for a palletizing robot.	
	› Designed and executed Motion Planning, Trajectory Planning, and preliminary simulations for pick-and-place tasks.	
	› Slide: link ., Video: Video-1 , Video-2 , Video-3	
Aug – Dec 2018	Chicken packaging Picker Project with Cartesian robot	FIBO
	› Designed and built the structure of a Cartesian robot from scratch and fine-tuning the PID control system.	
	› Developed communication protocols between a computer and a microcontroller for control purposes.	