

EDUCATION

Northern Arizona University M.S in Informatics, GPA: 4.00/4.00 (until Spring 2020)	Flagstaff, AZ, USA 2019–Present
Hanoi University of Science and Technology B.S in Control Engineering and Automation (Talented Program), GPA: 3.44/4.00	Hanoi, Vietnam 2014–2019

PROFESSIONAL EXPERIENCE

Northern Arizona University Graduate Research Assistant at School of Informatics, Computing and Cyber Systems	Flagstaff, AZ, USA 2019 –Present
<ul style="list-style-type: none">– Gaussian Process based Distributed Model Predictive Control for Multi-agent Systems– Adaptive Sampling for Mobile Robotic Sensor Networks– Flagstaff’s F1/10 Robo-Racing Project	
Vietnam Maritime University Research Intern at School of Mechanical Engineering	Hai Phong, Vietnam 2017 –2019
<ul style="list-style-type: none">– Robust adaptive control of shipboard container cranes using MRAC and neural networks– Research, design and manufacture of the model of floating cranes for loading and unloading containers at Vietnam’s seaports	

RESEARCH INTEREST

- Distributed Model Predictive Control for Multi-agent Systems
- Machine Learning based Control
- Robotics and Autonomous Systems

SCHOLARSHIPS AND AWARDS

- Student Travel Award by the IEEE Control Systems Society (CSS) to attend the 2020 IEEE Conference on Control Technology and Applications (CCTA)
- Northern Arizona University’s Presidential Fellowship award for incoming graduate students in 2019
- Odon Vallet’s Scholarship (established by Prof. Odon Vallet from France’s Sorbonne University) for Excellent Undergraduate Students in 2018
- Conference Travel Award by the Vietnam’s National Foundation for Science and Technology Development (NAFOSTED) to attend the 2018 IEEE Conference on System Science and Engineering (ICSSE)
- Certificate of training program in leadership, communication, creative and critical thinking, culture knowledge and teamwork skills at FPT Center for Young Talents in 2017
- Gold Medal in the Vietnam’s National Mathematical Olympiad for Undergraduate Students in 2015

PUBLICATIONS

- [1] **V.-A. Le**, L. Nguyen, and T. X. Nghiem, “An efficient adaptive sampling approach for mobile robotic sensor networks using proximal admm”, *2021 American Control Conference (ACC)*, submitted.
- [2] **V.-A. Le** and T. X. Nghiem, “Gaussian process based distributed model predictive control for multi-agent systems using sequential convex programming and admm”, in *2020 IEEE Conference on Control Technology and Applications (CCTA)*, IEEE, 2020, pp. 31–36.
- [3] H. X. Le, **V.-A. Le**, and L. Nguyen, “Adaptive fuzzy observer based hierarchical sliding mode control for uncertain 2d overhead cranes”, *Cyber-Physical Systems*, vol. 5, no. 3, pp. 191–208, 2019.
- [4] **V.-A. Le**, H.-X. Le, L. Nguyen, and M.-X. Phan, “An efficient adaptive hierarchical sliding mode control strategy using neural networks for 3d overhead cranes”, *International Journal of Automation and Computing*, vol. 16, no. 5, pp. 614–627, 2019.
- [5] T. X. Nghiem, T.-D. Nguyen, and **V.-A. Le**, “Fast gaussian process based model predictive control with uncertainty propagation”, in *2019 57th Annual Allerton Conference on Communication, Control, and Computing (Allerton)*, IEEE, 2019, pp. 1052–1059.
- [6] V. T. Nguyen, T. K. D. Ha, **V.-A. Le**, T. D. Pham, H. T. Vo, and Q. T. Pham, “Modeling and integral hierarchical sliding-mode control for 2d ship-mounted crane”, in *2019 First International Symposium on Instrumentation, Control, Artificial Intelligence, and Robotics (ICA-SYMP)*, IEEE, 2019, pp. 82–85.
- [7] A. T. Le, M. C. Hoang, V. T. Pham, C. N. Luong, D. T. Vu, and **V.-A. Le**, “Adaptive neural network sliding mode control of shipboard container cranes considering actuator backlash”, *Mechanical Systems and Signal Processing*, vol. 112, pp. 233–250, 2018.
- [8] **V.-A. Le**, X. H. Le, D. T. Vu, V. T. Pham, A. T. Le, and M. C. Hoang, “Designing an adaptive controller for 3d overhead cranes using hierarchical sliding mode and neural network”, in *2018 International Conference on System Science and Engineering (ICSSE)*, IEEE, 2018, pp. 1–6.

SKILLS

- **Programming languages:** Python, Julia, C/C++, MATLAB, R.
- **Tools:** Git, LaTeX, Robot Operating System (ROS).

REFERENCES

- Dr. Truong Xuan Nghiem
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