

Xin YANG

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CONTACT

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EDUCATION

KU Leuven

Ph.D. student (23'-), supervised by Prof. Dimitrios Chronopoulos

Gent, Belgium

Feb. 2023 - Present

Tongji University

M.S. in Vehicle Engineering

Shanghai, China

Sept. 2019 - Mar. 2022

- **Cumulative GPA: 4.67/5.00;**
- **Scholarships and awards:** Graduate Entry Award, 2019; Outstanding Student Award (2021);
- **Course:** Vehicle dynamics@TJU, Modern Control Theory@TJU, Nonlinear Control Theory@TJU;

Chongqing University

B.S. in Vehicle Engineering

Chongqing, China

Sept. 2015 - Jun. 2019

- **Cumulative GPA: 3.68/4.00 (Ranking 5/144);**
- **Scholarships and awards:** National Encouragement Scholarship, 2017; Outstanding Graduate of Chongqing University, 2019 ; Outstanding Student Award (top 3%), 2017 and 2018; Selected to Excellent Student Program (top 5%, on basis of outstanding academic performance);

JOURNALS

- [1] **Yang, X.***, Fang, C., Kundu, P., Yang, J., Chronopoulos, D. (2024). A decision-level sensor fusion scheme integrating ultrasonic guided wave and vibration measurements for damage identification. *Mechanical Systems and Signal Processing*, 219, 111597. doi:[10.1016/j.ymssp.2024.111597](https://doi.org/10.1016/j.ymssp.2024.111597). [\[paper\]](#)
- [2] **Yang, X.***, Farrokhhabadi, A., Rauf, A., Liu, Y., Talemi, R., Kundu, P., Chronopoulos, D. (2024). Transfer learning-based Gaussian process classification for lattice structure damage detection. *Measurement*, 238, 115387. doi:[10.1016/j.measurement.2024.115387](https://doi.org/10.1016/j.measurement.2024.115387). [\[paper\]](#)
- [3] Fang, C., **Yang, X.**, Gryllias, K., Vandepitte, D., Liu, X., Zhang, L., Chronopoulos, D. (2025). Using removable sensors in structural health monitoring: A Bayesian methodology for attachment-to-attachment uncertainty quantification. *Mechanical Systems and Signal Processing*, 224, 111973. doi:[10.1016/j.ymssp.2024.111973](https://doi.org/10.1016/j.ymssp.2024.111973). [\[paper\]](#)
- [4] Mardanshahi, A.*, Sreekumar, A., **Yang, X.***, Barman, S.K., Chronopoulos, D. (2025). Sensing Techniques for Structural Health Monitoring: A State-of-the-Art Review on Performance Criteria and New-Generation Technologies. *Sensors*, 1, 0. doi:[10.3390/s1010000](https://doi.org/10.3390/s1010000). [\[paper\]](#)
- [5] Lu, H., Chinchilla, S., **Yang, X.***, Gryllias, K., Chronopoulos, D. (2024). Deep learning uncertainty quantification for ultrasonic damage identification in composite structures. *Composite Structures*, 338, 118087. doi:[10.1016/j.compstruct.2024.118087](https://doi.org/10.1016/j.compstruct.2024.118087). [\[paper\]](#)

- [6] Farrokhhabadi, A., Lu, H., **Yang, X.**, Rauf, A., Talemi, R., Chronopoulos, D. (2024). Energy Absorption Assessment of Recovered Shapes in 3D-Printed Star Hourglass Honeycombs: Experimental and Numerical Approaches. *Composite Structures*, 347, 118444. doi:10.1016/j.compstruct.2024.118444. [\[paper\]](#)
- [7] Hu, X., **Yang, X.**, Feng, F., Liu, K., Lin, X. (2021). A particle filter and long short-term memory fusion technique for lithium-ion battery remaining useful life prediction. *Journal of Dynamic Systems, Measurement, and Control*, 143 (6), 061001. doi:10.1115/1.4049234. [\[paper\]](#)

CONFERENCES

- [1] **Yang, X.**, Mardanshahi, A., Chronopoulos, D. (2024). A novel fusion approach by integrating ultrasonic guided waves and vibration measurements for damage location: a numerical investigation. *International Conference on Recent Advances in Structural Dynamics (RASD)*.
- [2] **Yang, X.**, Chen, F. (2022). Deep Uncertainty Quantification of Prognostic Techniques for Proton Exchange Membrane Fuel Cell. *Vehicle Electrification and Powertrain Diversification Technology Forum Part II*. [\[paper\]](#)
- [3] **Yang, X.**, Chen, F., Jiao, J., Liu, S. (2021). Machine learning-based voltage degradation prediction with uncertainty quantifications for PEMFC. *2021 5th CAA International Conference on Vehicular Control and Intelligence (CVCI)*. [\[paper\]](#)

ACADEMIC ACTIVITIES

- Journal Reviewer:
 - Mechanical Systems and Signal Processing
 - IEEE Transactions on Industrial Informatics
 - IEEE Transactions on Instrumentation and Measurement
 - Expert Systems with Applications
 - Engineering Applications of Artificial Intelligence
 - Advanced Engineering Informatics
 - Measurement

WORKING EXPERIENCE

NIO Inc.

Intern @ Vehicle Chassis Control Group

Shanghai, China

Feb. 2022 - Jun.2022

- Lane centering control, Hardware in-the-loop testing, Ethernet/CAN communication protocol

Holomatic Inc.

Intern @ Perception Group for Autonomous Driving

Shanghai, China

Sep. 2021 - Nov.2021

- 3D object detection, Driving lane detection/segmentation

OTHER SKILLS



Coding: Python (Pytorch), MATLAB (Simulink), C++/C (LeetCode 300+), Linux(Ubuntu), Labview...



Languages: Mandarin, English (IELTS 7.0), Dutch (A2)



Expertise: Defect Detection, Deep/Transfer Learning, Data Analysis & Learning, Simulink System Modelling & Control...