PhD students:

1. *Gang ZHENG* (The Hong Kong Polytechnic University): "Vibration-based condition assessments of cables in cable-supported bridges", Ph.D. Degree awarded in 2002 (Co-supervisor);
2. *Xian-tong ZHOU* (The Hong Kong Polytechnic University): "Vibration-based damage detection of tall building structures", Ph.D. Degree awarded in 2004 (Co-supervisor);
3. *Yuan-feng DUAN* (The Hong Kong Polytechnic University): "Vibration control of stay cables using semi-active magneto-rheological (MR) dampers", Ph.D. Degree awarded in 2004 (Co-supervisor);
4. *Xu-gang HUA* (The Hong Kong Polytechnic University): "Structural health monitoring and condition assessment of long-span bridges", Ph.D. Degree awarded in 2006 (Chief supervisor);
5. *Xiao-wei YE* (The Hong Kong Polytechnic University): "Fatigue reliability analysis of cable-supported bridges based on monitoring data", Ph.D. Degree awarded in 2010 (Chief supervisor);
6. *Ming ZHAO* (Zhejiang University, China): "Stochastic optimal active/semi-active control of stay cables", Ph.D. Degree awarded in 2010 (Co-supervisor);
7. *Raed ALSALEH* (University of Pavia, Italy): "Verification of wind pressure and wind induced response of a supertall structure using a long term structural health monitoring system", Ph.D. Degree awarded in 2010 (Co-supervisor);
8. *Zhao-hui CHEN* (The Hong Kong Polytechnic University): "Semiactive vibration control using self-sensing magnetorheological (MR) dampers", Ph.D. Degree awarded in 2011 (Chief supervisor);
9. *Hong-wen XIA* (The Hong Kong Polytechnic University): "SHM-based condition assessment of in-service bridge structures using strain measurement", Ph.D. Degree awarded in 2012 (Chief supervisor);
10. *Wei-yang LIAO* (The Hong Kong Polytechnic University): "Comfort assessment of tower-like slender structures under typhoons and earthquakes", Ph.D. Degree awarded in 2012 (Chief supervisor);
11. *Peng ZHANG* (The Hong Kong Polytechnic University): "Environmental effects on super-tall structures: field monitoring and numerical analysis", Ph.D. Degree awarded in 2016 (Co-supervisor);
12. *Yun-xia XIA* (The Hong Kong Polytechnic University): "Integration of long-term SHM data into bridge condition assessment", Ph.D. Degree awarded in 2017 (Chief supervisor);
13. *Shu-qin YE* (The Hong Kong Polytechnic University): "Vibration attenuation for high-speed trains using magnetorheological (MR)

dampers", Ph.D. Degree awarded in 2017 (Chief supervisor);

14. *You-wu WANG* (The Hong Kong Polytechnic University): "Bayesian-based methodology for progressive structural health evaluation and prediction by use of monitoring data", Ph.D. Degree awarded in 2017 (Chief supervisor);

15. *Xiao WANG* (The Hong Kong Polytechnic University): "Frequentist and Bayesian approaches for probabilistic fatigue life assessment of high-speed train using in-service monitoring data", Ph.D. Degree awarded in 2018 (Chief supervisor);

16. *Parviz MORADI POUR* (Queensland University of Technology, Australia and The Hong Kong Polytechnic University, Hong Kong): "An improved modal strain energy method for bridge damage identification", Ph.D. Degree awarded in 2018 (Chief supervisor);

17. *Xiao-zhou LIU* (The Hong Kong Polytechnic University): "Development of online wheel defect detection methods for high-speed trains", Ph.D. Degree awarded in 2018 (Chief supervisor);

18. *Ran CHEN* (The Hong Kong Polytechnic University): "Parametric and nonparametric Bayesian mixture models for bridge condition assessment", Ph.D. Degree awarded in 2019 with oral examination on 30 September 2019 (Chief supervisor);

19. *Qiu-hu ZHANG* (The Hong Kong Polytechnic University): "Sparse Bayesian learning approaches for damage detection in a population of nominally identical structures", Ph.D. Degree awarded on 24 September 2020 with oral examination on 6 July 2020 (Chief supervisor);

20. *Chi XU* (The Hong Kong Polytechnic University): "A Bayesian blind source separation by embedding Gaussian process prior and applications on structural health monitoring", Ph.D. Degree awarded on 24 September 2020 with oral examination on 10 August 2020 (Chief supervisor);

21. *Si-qi DING* (The Hong Kong Polytechnic University): "Carbon nanotube-based hierarchical fillers modified cementitious composites for smart structures", Ph.D. Degree awarded on 28 October 2020 with oral examination on 10 September 2020 (Chief supervisor);

22. *Yi-ting ZHANG* (The Hong Kong Polytechnic University): "On investigation of acoustic waves and its applications in noise and air studies", Ph.D. Degree awarded on 9 February 2022 with oral examination on 26 November 2021 (Co-supervisor);

23. *Si-xin CHEN* (The Hong Kong Polytechnic University): "Generalizable deep learning for structural health monitoring: from graph formulation to domain adaptation", Ph.D. Degree awarded on 16 March 2022 with oral examination on 21 January 2022 (Chief supervisor);

24. *Bei-yang ZHANG* (The Hong Kong Polytechnic University): "Multi-fidelity modelling based on adaptive sparse polynomial chaos expansion for bridge damage identification", Ph.D. Degree awarded on 17 August 2022 with oral examination on 6 July 2022 (Chief supervisor);

25. *Yun-ke LUO* (The Hong Kong Polytechnic University): "Towards the understanding of railway flange squeal: phenomenon, mechanism, and hybrid model-enabled global sensitivity analysis", Ph.D. Degree awarded on 10 October 2022 with oral examination on 19 September 2022 (Chief supervisor);

26. *Yuan-hao WEI* (The Hong Kong Polytechnic University): "Compressed sensing applied to health monitoring of train components", 2019-2022, Ph.D. research student (Chief supervisor);

27. *Si-yi CHEN* (The Hong Kong Polytechnic University): "Identification of linear/nonlinear dynamic system by using hybrid wavelet multiresolution analysis and Kalman filter", 2019-2022, Ph.D. research student (Chief supervisor);

28. *Yang LU* (The Hong Kong Polytechnic University): "Maglev train-bridge control platform based on intelligent monitoring and the key technologies", 2019-2025, Ph.D. research student (Chief supervisor);

29. *Xin YE* (The Hong Kong Polytechnic University): "Compressive sensing-based lost data recovery of stressometers for bridge cables", 2020-2023, Ph.D. research student (Chief supervisor);

30. *Zhen LIN* (The Hong Kong Polytechnic University): "Sustainable marine infrastructure enabled by the innovative use of seawater sea-sand concrete and fibre-reinforced polymer composites", 2020-2024, Ph.D. research student (Chief supervisor);

31. *Shuo HAO* (The Hong Kong Polytechnic University): "Understanding and quantification of railway health status by structural health monitoring", 2020-2024, Ph.D. research student (Chief supervisor);

32. *You-liang ZHENG* (The Hong Kong Polytechnic University): "Sparse Bayesian learning approaches for high-speed train wheel defect detection using in-service monitoring data", 2021-2024, Ph.D. research student (Chief supervisor);

33. *Lei YUAN* (The Hong Kong Polytechnic University): "Hybrid physics-based and machine learning models for fast detection of short-wavelength railway track irregularities", 2021-2024, Ph.D. research student (Chief supervisor);

34. *Wei-jia ZHANG* (The Hong Kong Polytechnic University): "A novel microbe induced self-healing geopolymer concrete for sustainable and resilient civil infrastructure", 2021-2024, Hong Kong PhD Fellowship Scheme 2021/22 research student (Chief supervisor);

35. *En-ze RUI* (The Hong Kong Polytechnic University): "Development of a physics-based data-driven model for rail and wheel wear prediction under the instruction of machine learning algorithm", 2021-2024, Ph.D. research student (Chief supervisor);

36. *Gao-feng JIANG* (The Hong Kong Polytechnic University): "Vibration-based condition monitoring of maglev rail joints", 2022-2025, Ph.D. research student (Chief supervisor);

37. *Qi ZHU* (The Hong Kong Polytechnic University): "Nonlinear dynamic control of maglev suspension system using reinforcement learning approach", 2022-2025, Hong Kong PhD Fellowship Scheme 2022/23 research student (Chief supervisor);

38. *Yan-ke TAN* (Tongji University, China and The Hong Kong Polytechnic University, Hong Kong): "Composite sensor system placement methodology based on multi-objective optimization", 2022-2025, Ph.D. research student (Chief supervisor);

39. *Da-zhi DANG* (The Hong Kong Polytechnic University): "A novel rail crack identification method using PZT-FBG sensing system", 2022-2025, Ph.D. research student (Chief supervisor);

40. *Yuan-jiang ZENG* (The Hong Kong Polytechnic University): "Analysis of longitudinal vibration characteristics and longitudinal movements of expansion joints of long-span bridges under wind-wave and traffic loads", 2023-2027, Ph.D. research student (Chief supervisor);

41. *Xin-yue XU* (The Hong Kong Polytechnic University): "Research on refined analysis and evolutionary prediction of ballastless track slab damage for high-speed railroad using digital twin", 2023-2027, Ph.D. research student (Chief supervisor);

42. *Pei-lin LI* (Tongji University, China and The Hong Kong Polytechnic University, Hong Kong): "Modal identification and pre-warning of runway structure based on the analysis of dynamic strain data", 2023-2027, Ph.D. research student (Chief supervisor).

MPhil students:

1. *Yan-lin GUO* (The Hong Kong Polytechnic University): "Monitoring-based assessment of bridges subject to ship collision", M.Phil. Degree awarded in 2010 (Chief supervisor);

2. *Ming LI* (The Hong Kong Polytechnic University): "SHM-based condition assessment of bridges using Gaussian process regression", M.Phil. Degree awarded on 12 December 2017 with oral examination on 26 September 2017 (Chief supervisor).

MSc dissertations supervised:

1. *Ka-yan NG* (MSc dissertation): "Analysis of displacement and response measurements of high-rise structures using global positioning system (GPS) technology", 2009/2010 (Chief supervisor);

2. *Yang CHEN* (MSc dissertation): "Feasibility of integrating structural analysis and monitoring with short-term resource activity scheduling simulation", 2009/2010 (Co-supervisor);

3. *Yan-xiong TAN* (MSc dissertation): "Wind property and wind response analysis of Guangzhou New TV Tower during typhoons", 2010/2011 (Chief supervisor);

4. *Bin LUO* (MSc dissertation): "In-construction stress of a tall building: finite element analysis versus field measurement", 2011/2012 (Chief supervisor);

5. *Xiao-dong ZHOU* (MSc dissertation): "Vibration and dynamic response monitoring of a tall building using a wireless sensor network", 2011/2012 (Chief supervisor);

6. *Bo WANG* (MSc dissertation): "Wind data analysis of a slender supertall structure", 2012/2013 (Chief supervisor);

7. *Zheng FANG* (MSc dissertation): "Assessment of welding residual stress in steel structural members of a tall building", 2012/2013 (Chief

supervisor);

8. *Xiao WANG* (MSc dissertation): "Statistical counting methods for strain-based structural condition assessment", 2013/2014 (Chief supervisor);
9. *Yi-fei PEI* (MSc dissertation): "Crack detection of railway turnouts using piezoelectric sensors", 2014/2015 (Chief supervisor);
10. *Qian-li XIE* (MSc dissertation): "Analysis of long-term monitoring data obtained by an optical fiber sensory system deployed on Dongjiang Water Mains", 2014/2015 (Chief supervisor);
11. *Chi ZHANG* (MSc dissertation): "Monitoring-based evaluation of unsymmetric dynamic response of a suspension bridge due to railway traffic and wind loading", 2014/2015 (Chief supervisor);
12. *Yu-hang SHI* (MSc dissertation): "Fatigue life evaluation of high-speed train bogies using in-service monitoring data of strain", 2015/2016 (Chief supervisor);
13. *Chi XU* (MSc dissertation): "A synthesized indicator for structural integrity evaluation of underground water pipes", 2015/2016 (Chief supervisor);
14. *An-di TONG* (MSc dissertation): "Analysis of dynamic interaction and coupling in a high-speed train based on on-board monitoring data", 2016/2017 (Chief supervisor);
15. *Yuan-hao WEI* (MSc dissertation): "A Bayesian method for wheel defect detection based on real-time dynamic strain measurement of rail tracks", 2017/2018 (Chief supervisor);
16. *Yang LU* (MSc dissertation): "Life cycle assessment of high-speed railway", 2017/2018 (Chief supervisor);
17. *Yi GONG* (MSc dissertation): "Model-free damage identification of high-speed railway enabled by on-line monitoring and Bayesian framework", 2018/2019 (Chief supervisor);
18. *Bei-lei LIU* (MSc dissertation): "Numerical and experimental analysis of maglev vehicle-suspension-guideway coupling system", 2019/2020 (Chief supervisor);
19. *Hong-ke LI* (MSc dissertation): "Maglev train-track-bridge dynamic interaction: numerical simulation and parametric study", 2020/2021 (Chief supervisor);
20. *Yong-qi LI* (MSc dissertation): "Time-variant reliability prediction of long-span bridges based on Bayesian dynamic model and monitored extreme stress data", 2020/2021 (Chief supervisor).