

Curriculum Vitae



Personal information

- Full name: Phan Duy Hung
- Sex: Male
- Nationality: Vietnam
- Email: hungpd2@fe.edu.vn; hungbkhn@gmail.com
- Google Scholar: <https://scholar.google.com.vn/citations?user=V3paQH8AAAAJ&hl=en>

Employment

- 01/2017 - present: Director of Master Software Engineering (MSE) Program, FPT University.
- 01/2010 - present: Head and lecturer of Information Technology Specialization Department at Hanoi FPT University.
- 01/2011 - 03/2017: FPT Technical specialist at FPT Software, FPT Technology Solution Company (FIS/FTS), FIS.
- 12/2008 - 12/2009: Collaborator at FPT Software at Hanoi.
- 11/2002 - 12/2009: Lecturer & Researcher at Hanoi University of Technology.

Education

- 2008: PhD of the Grenoble Institute of Technology, France. Faculty: Signal, Image, Speech, Telecom, (Signal processing)
- 2003: Master of electronic and telecommunication Faculty, Hanoi University of technology.
- 2001: Engineer of electronic and telecommunication Faculty, Hanoi University of technology.
- 2015: miniMBA of FPT School of Business& Technology

Research Interest

- Signal Processing & Identification, Embedded systems, Measurement & Automatic Control, IoT, BigData, AI.

- Subjects are preferred for teaching:
 - For Master: IoT Application Development, Digital Signal Processing, Bigdata, AI, ML, DL, Research Methods and Academic Writing.
 - For Students: Embedded Hardware System, Embedded Software Development (Linux-Arm), Android Programming, C, C++ Programming, DSP, IVP, ML.

Publication

Journal papers (ISI/Scopus)

1. **P D Hung**, D Q Dat. Customer behavior clustering based on Balance history using Dynamic Time Warping distance. International Journal of Machine Learning and Computing (IJMLC). ISSN: 2010-3700. 2019.
2. **P D Hung**, V V Chin, N T Chinh, T D Tung. A flexible platform for industrial applications based on RS485 networks. Journal of Communications. ISSN: 1796-2021. 2019.
3. **P D Hung**, N V Su, V T Diep. Surface Classification of Damaged Concrete using Deep Convolutional Neural Network. Pattern Recognit. Image Anal. (2019) 29(4): 676-687.
4. **P D Hung**, T M Giang, L H Nam, P M Duong. Vietnamese speech command recognition using Recurrent Neural Networks. Journal of Advanced Computer Science and Applications (IJACSA) 10 (7), 194-200.
5. **P D Hung**, D Q Linh. Implementing an Android Application for Automatic Vietnamese Business Card Recognition. Pattern Recognit. Image Anal. (2019) 29(1): 156. <https://doi.org/10.1134/S1054661819010188>.

Conference papers, book chapter (ISI/Scopus)

1. L G Cuong, **P D Hung**, N L Bach. 2020. ODC Team Management In Action. In Proceedings of the 5th International Conference on Intelligent Information Technology (ICIIT 2020). ACM, New York, NY, USA.
2. **P D Hung**, D T Giang. Traffic Light Control at Isolated Intersections in case of Heterogeneous Traffic. (eds) AICI 2020. Computational Intelligence 2020.
3. L G Cuong, **P D Hung**, N L Bach. 2019. Risk Management for Agile Projects in Offshore Vietnam. In Proceedings of the Tenth International Symposium on Information and Communication Technology (SoICT 2019). ACM, New York, NY, USA.
4. **P D Hung**. Counting People using images from two low cost Webcams. Lecture note computer science 11814.
5. **P D Hung**, N C Minh. Application of fuzzy logic in university suggestion system for Vietnamese high school students. Lecture note computer science 11814.
6. **P D Hung**, T Q Thinh. Cryptocurrencies Price Index Prediction Using Neural Networks On Bittrex Exchange. Lecture note computer science 11814.
7. V T Diep, **P D Hung**, T D Tung. Energy saving solution for air conditioning systems. Lecture note computer science 11814.
8. **P D Hung**, T M Giang, L H Nam, P M Duong, H V Thang, V T Diep. Smarthome control unit using Vietnamese speech command. (eds) Intelligent Computing & Optimization. ICO 2019. Advances in Intelligent Systems and Computing 1072, pp. 1-11, 2020. https://doi.org/10.1007/978-3-030-33585-4_29.
9. **P D Hung**, N N Kien. SSD-MobileNet implementation for classifying fish species. (eds) Intelligent Computing & Optimization. ICO 2019. Advances in Intelligent Systems and Computing 1072, pp. 1-10, 2020. https://doi.org/10.1007/978-3-030-33585-4_40.

10. **P D Hung**, L H Nam, H V Thang. Flexible development for embedded system software. (eds) RICE 2019. Advances in Intelligent Systems and Computing, 2019.
11. L T Kien, **P D Hung**, K H My. Evaluating Blockchain-IoT Frameworks. (eds) RICE 2019. Advances in Intelligent Systems and Computing, 2019.
12. **P D Hung**, P M Duong, T M Giang, V T Diep. Model-driven design for fast deployment of embedded systems. 2019 IEEE 2nd International Conference of Intelligent Robotic and Control Engineering (IRCE 2019), Singapore, 2019.
13. V T Diep, **P D Hung**, N T Su. I-PD Controller Design based on Robust Viewpoint. 2019 IEEE 2nd International Conference of Intelligent Robotic and Control Engineering (IRCE 2019), Singapore, 2019.
14. N N Son, **P D Hung**. 2019. Agile Solution of Color Image Encryption Using Random Permutation Algorithm. In Proceedings of the 2019 7th International Conference on Computer and Communications Management (ICCCM 2019). ACM, New York, NY, USA, 13-17. DOI: <https://doi.org/10.1145/3348445.3348470>.
15. L V Chuong, **P D Hung**, V T Diep. 2019. Robotic Process Automation and Opportunities for Vietnamese Market. In Proceedings of the 2019 7th International Conference on Computer and Communications Management (ICCCM 2019). ACM, New York, NY, USA, 86-90. DOI: <https://doi.org/10.1145/3348445.3348458>.
16. **P D Hung**, D T Giang. 2019. Continuous Integration for Android Application Development and Training. In Proceedings of the 2019 3rd International Conference on Education and Multimedia Technology (ICEMT 2019). ACM, New York, NY, USA, 145-149. DOI: <https://doi.org/10.1145/3345120.3345158>.
17. C M Tae, **P D Hung**. 2019. Comparing ML Algorithms on Financial Fraud Detection. In Proceedings of the 2019 2nd International Conference on Data Science and

Information Technology (DSIT 2019). ACM, New York, NY, USA, 25-29. DOI: <https://doi.org/10.1145/3352411.3352416>.

18. **P D Hung**, N T T Lien, N D Ngoc. 2019. Customer Segmentation Using Hierarchical Agglomerative Clustering. In Proceedings of the 2019 2nd International Conference on Information Science and Systems (ICISS 2019). ACM, New York, NY, USA, 33-37. DOI: <https://doi.org/10.1145/3322645.3322677>.
19. **P D Hung**, N D Ngoc, T D Hanh. 2019. K-means Clustering Using R A Case Study of Market Segmentation. In Proceedings of the 2019 5th International Conference on E-Business and Applications (ICEBA 2019). ACM, New York, NY, USA, 100-104. DOI: <https://doi.org/10.1145/3317614.3317626>.
20. **P D Hung**, T D Hanh, T D Tung. 2019. Term Deposit Subscription Prediction Using Spark MLlib and ML Packages. In Proceedings of the 2019 5th International Conference on E-Business and Applications (ICEBA 2019). ACM, New York, NY, USA, 88-93. DOI: <https://doi.org/10.1145/3317614.3317618>.
21. N D Linh, **P D Hung**, V T Diep, T D Tung. 2019. Risk Management in Projects Based on Open-Source Software. In Proceedings of the 2019 8th International Conference on Software and Computer Applications (ICSCA '19). ACM, New York, NY, USA, 178-183. DOI: <https://doi.org/10.1145/3316615.3316648>.
22. **P D Hung** and B T Vinh. Vulnerabilities in IoT Devices with Software-Defined Radio. 2019 IEEE 4th International Conference on Computer and Communication Systems (ICCCS), Singapore, 2019, pp. 664-668. doi: 10.1109/CCOMS.2019.8821711.
23. **P D Hung**, L D Huynh. E-Commerce Recommendation System Using Mahout. 2019 IEEE 4th International Conference on Computer and Communication Systems

- (ICCCS), Singapore, 2019, pp. 86-90. doi: 10.1109/CCOMS.2019.8821663.
24. N T Nam, **P D Hung**. 2019. Padding Methods in Convolutional Sequence Model: An Application in Japanese Handwriting Recognition. In Proceedings of the 3rd International Conference on Machine Learning and Soft Computing (ICMLSC 2019). ACM, New York, NY, USA, 138-142. DOI: <https://doi.org/10.1145/3310986.3310998>.
 25. A Q Huy, **P D Hung**. 2019. Security and Cost Optimization Auditing for Amazon Web Services. In Proceedings of the 2nd International Conference on Software Engineering and Information Management (ICSIM 2019). ACM, New York, NY, USA, 44-48. DOI: <https://doi.org/10.1145/3305160.3305181>.
 26. **P D Hung**. 2018. Detection of Central Sleep Apnea Based on a Single-Lead ECG. In Proceedings of the 2018 5th International Conference on Bioinformatics Research and Applications (ICBRA '18). ACM, New York, NY, USA, 78-83. DOI: <https://doi.org/10.1145/3309129.3309132>.
 27. **P D Hung**, T D Hanh, V T Diep. 2018. Breast Cancer Prediction Using Spark MLlib and ML Packages. In Proceedings of the 2018 5th International Conference on Bioinformatics Research and Applications (ICBRA '18). ACM, New York, NY, USA, 52-59. DOI: <https://doi.org/10.1145/3309129.3309133>.
 28. L G Cuong, **P D Hung**, B T Vinh. 2018. Migrating Vietnam Offshore into Agile. In Proceedings of the Ninth International Symposium on Information and Communication Technology (SoICT 2018). ACM, New York, NY, USA, 329-336. DOI: <https://doi.org/10.1145/3287921.3287924>.
 29. N T Nam, **P D Hung**. 2018. Pest detection on Traps using Deep Convolutional Neural Networks. In Proceedings of the 2018 International Conference on

- Control and Computer Vision (ICCCV '18). ACM, New York, NY, USA, 33-38. DOI: <https://doi.org/10.1145/3232651.3232661>.
30. **P D Hung**. 2018. Central Sleep Apnea Detection Using an Accelerometer. In Proceedings of the 2018 International Conference on Control and Computer Vision (ICCCV '18). ACM, New York, NY, USA, 106-111. DOI: <https://doi.org/10.1145/3232651.3232660>.
 31. **P D Hung**. 2017. Estimating respiration rate using an accelerometer sensor. In Proceedings of the 8th International Conference on Computational Systems-Biology and Bioinformatics (CSBio '17). ACM, New York, NY, USA, 11-14. DOI: <https://doi.org/10.1145/3156346.3156349>.
 32. **P D Hung**. Estimating confident index of respiratory signal using an accelerometer. 2017 IEEE 2nd International Conference on Signal and Image Processing (ICSIP), Singapore, 2017, pp. 413-417. doi: 10.1109/SIPROCESS.2017.8124574.
 33. **P D Hung**, S Bonnet, R Guillemaud, E Castelli and P T N Yen. Estimation of respiratory waveform and heart rate using an accelerometer. 2008 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Vancouver, BC, 2008, pp. 4916-4919. doi: 10.1109/IEMBS.2008.4650316.
 34. **P D Hung**, S Bonnet, R Guillemaud, E Castelli and P T N Yen. Estimation of respiratory waveform using an accelerometer. 2008 5th IEEE International Symposium on Biomedical Imaging: From Nano to Macro, Paris, 2008, pp. 1493-1496. doi: 10.1109/ISBI.2008.4541291.

Other journal & conference papers

1. V T Diep, **P D Hung**. 2018. A new tuning method of PID controllers for industrial cascade control systems. Thermal Energy Review, ISSN 0868-3336 140 (3), 18-23.
2. **P D Hung**, V M Thang, V T Diep. 2017. EEG Features Extraction for Classification of Human Intention and Non-Intention. Journal of Science and Technology - Technical Universities 123, 59-64.
[http://jst.hust.edu.vn/NewsFiles/113 News In 123.rar](http://jst.hust.edu.vn/NewsFiles/113%20News%20In%20123.rar)
3. N V Manh, V T Diep, **P D Hung**. 2016. A Synthesis Method of Robust Cascade Control System. Journal of Automation and Control Engineering Vol 4 (2).
4. **P D Hung**, N T L Huong, V T Diep. 2010. Construction of the ARM-Linux based embedded computer and application for the measurement system. Journal of Science and Technology - Technical Universities 77, 27-31. ISSN 0868-3980.
5. **P D Hung**, P T N Yen, E Castelli. 2006. Detection of R peaks of electrocardiogram by wavelet transformation. Journal of Science and Technology - Technical Universities 56, 22-24. ISSN 0868-3980.
6. **P D Hung**, P T N Yen, E Castelli. 2006. Denoise the signal ECG. Journal of Science and Technology - Technical Universities 56, 28-30. ISSN 0868-3980.
7. **P D Hung**, N Q Trung, E Castelli. 2004. The wavelet transformation- apply to detect the Pitch and determine V-UV of the speech. Journal of Science and Technology - Technical Universities 44, 41-45, Vietnam. ISSN 0868-3980.

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8. V T Diep, N T Giang, **P D Hung**. 2015. Hệ thống điều khiển đèn giao thông mô phỏng bằng tích hợp phần mềm SUMO và Matlab. Hội nghị khoa học kỹ thuật đo lường toàn quốc lần thứ VI. Proceeding ISBN: 978-604-67-0521-5. pp. 913-919.
9. N V Manh, V T Diep, **P D Hung**. 2014. Chỉ số dao động mềm và dự trữ ổn định mềm áp dụng trong nghiên cứu hệ điều khiển tầng. Hội nghị Cơ điện tử toàn quốc lần thứ 7- VCM-2014, 16-21.

10. **P D Hung**, E Castelli, P T N Yen. 2007. Investigation the largest Lyapunov exponent on the signal heart rate variability and the apnea. International Workshop on Advanced Computing and Applications (ACOMP 2007). 59-64.
11. **P D Hung**, N T L Huong. 2005. Filter and continuous display with Labview software. Hội nghị khoa học kỹ thuật đo lường toàn quốc lần thứ IV, 387 - 390.
12. **P D Hung**, E Castelli, P T N Yen. 2005. Project filter through the placement of poles and zeros and apply for denoising electrocardiogram. Hội nghị khoa học kỹ thuật đo lường toàn quốc lần thứ IV, 326 - 328.
13. **P D Hung**, N T L Huong, P T N Yen, E Castelli. 2004. Application of the Wavelet transformation to denoising and analyzing the speech. ICEIC: International Conference on Electronics, Informations and Communications. 249-253.

Thesis Supervision

- **M.Sc.:** supervisor of 20 master thesis