

Binh P. Nguyen

Curriculum Vitae

September 2018

Address: School of Mathematics and Statistics
Cotton Building, Room 362, Gate 7
Victoria University of Wellington
Wellington, New Zealand
Phone: (+64 4) 4635233 ext 8896
Email: b.nguyen@vuw.ac.nz
WWW: <http://homepages.ecs.vuw.ac.nz/nguyenb5>

Appointments

08.2018–present	Senior Lecturer	School of Mathematics and Statistics Victoria University of Wellington (VUW), New Zealand
02.2017–07.2018	Scientist II	Institute of High Performance Computing (IHPC) Agency for Science, Technology and Research (A*STAR), Singapore
07.2015–01.2017	Research Fellow	Centre for Computational Biology Duke-NUS Medical School, Singapore
08.2012–07.2015	Research Fellow	Department of Mechanical Engineering National University of Singapore (NUS), Singapore
09.2011–07.2012	Research Associate	Department of Mechanical Engineering National University of Singapore
08.2007–08.2011	Research Scholar	Department of Electrical & Computer Engineering National University of Singapore
11.2002–07.2007	Lecturer	School of Information and Communication Technology (SoICT) Hanoi University of Science and Technology (HUST), Vietnam

Education

2007-2012	Ph.D. (<i>Electrical & Computer Engineering</i>)	National University of Singapore
2002-2004	M.Sc. (<i>Information Processing & Communications</i>)	Hanoi University of Science and Technology
1997-2002	B.Eng. (Hons.) (<i>Information Technology</i>)	Hanoi University of Science and Technology

Research Interests

Broadly interested in **Data science** and **Interdisciplinary computing**, currently more focusing on

- Health Data Sciences and Informatics
- Deep Learning
- Biomedical Image Analysis
- Bioinformatics
- Visual Analytics

Honors and Awards

- 2016 **Best Student Paper Award**, IEEE International Conference on Systems, Man, and Cybernetics, Hungary.
- 2016 **Poster Prize**, BioImage Informatics Conference, Singapore.
- 2015 **Junior Research Gold Award**, Neuroscience Academic Clinical Program Research Day, National Neuroscience Institute, Singapore.
- 2014 **Best Poster Award (Grand Prize)**, GPU Technology Workshop South East Asia, Singapore.
- 2007 **Certificate of Merit** (for working achievements), HUST, Vietnam.
- 2005 **Second Prize**, Science and Technology Innovations, HUST, Vietnam.
- 2005 **Third Prize**, “Vietnam Intelligence” software contest, Vietnam.
- 2002 **Second Prize**, “Vietnam Intelligence” software contest, Vietnam.
- 2002 **Certificate of Merit** (for excellent academic results during the course 1997–2002), HUST, Vietnam.
- 2000 **First Prize**, “Students with Information Technology” software contest, HUST, Vietnam.
- 1999 **Second Prize**, National Informatics Olympiad, Vietnam.

Grants

- 2018 **School Research Grant**, Principle Investigator (PI), NZ\$10,000, School of Mathematics and Statistics, VUW.
- 2018 **GPU Grant**, 01 TITAN Xp, NVIDIA Corporation.
- 2017 **GPU Grant**, 01 TITAN Xp, NVIDIA Corporation.

Publications

(Google Scholar link: <http://scholar.google.com.sg/citations?user=dMkk-asAAAAJ>)

(* denotes corresponding author)

Refereed Journal Papers

1. Le, N.-Q.-K. and B. P. Nguyen* (2019). Prediction of FMN Binding Sites in Electron Transport Chains based on 2-D CNN and PSSM Profiles. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*. [accepted].
2. Cai, L., B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2017). A Two-level Clustering Approach for Multidimensional Transfer Function Specification in Volume Visualization. *The Visual Computer* **33**(2), 163–177. doi: 10.1007/s00371-015-1167-y.
3. Chen, X., B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2017). An Automatic Framework for Multi-label Brain Tumor Segmentation based on Kernel Sparse Representation. *Acta Polytechnica Hungarica* **14**(1). [invited paper], 25–43. doi: 10.12700/APH.14.1.2017.1.3.
4. Chen, X., B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2017). Reworking Multilabel Brain Tumor Segmentation – An Automated Framework Using Structured Kernel Sparse Representation. *IEEE Systems, Man, and Cybernetics Magazine* **3**(2). [invited paper], 18–22. doi: 10.1109/MSMC.2017.2664158.
5. Do, T. T. T. and B. P. Nguyen (2016). Comments on and corrections to “Hardware-software co-design architecture for Joint Photo Expert Graphic XR encoder”. *IET Image Processing* **10**(9), 681–682. doi: 10.1049/iet-ipr.2015.0572.
6. Do, T. T. T. and B. P. Nguyen (2016). Comments on and corrections to “Unified VLSI architecture for photo core transform used in JPEG XR”. *Electronics Letters* **52**(1), 33. doi: 10.1049/e1.2015.2869.
7. Nguyen, B. P., H. Heemskerk, P. T. C. So, and L. Tucker-Kellogg (2016). Superpixel-based Segmentation of Muscle Fibers in Multi-channel Microscopy. *BMC Systems Biology* **10**(Suppl 5:124), 39–50. doi: 10.1186/s12918-016-0372-2.
8. Cai, L., B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2015). Rule-enhanced Transfer Function Generation for Medical Volume Visualization. *Computer Graphics Forum* **34**(3), 121–130. doi: 10.1111/cgf.12624.
9. Nguyen*, B. P., W.-L. Tay, and C.-K. Chui (2015). Robust Biometric Recognition From Palm Depth Images for Gloved Hands. *IEEE Transactions on Human-Machine Systems* **45**(6), 799–804. doi: 10.1109/THMS.2015.2453203.
10. Wen, R., W.-L. Tay, B. P. Nguyen*, C.-B. Chng, and C.-K. Chui (2014). Hand Gesture Guided Robot-assisted Surgery based on a Direct Augmented Reality Interface. *Computer Methods and Programs in Biomedicine* **116**(2). [Editor’s choice archive], 68–80. doi: 10.1016/j.cmpb.2013.12.018.
11. Cai, L., W.-L. Tay, B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2013). Automatic Transfer Function Design for Medical Visualization using Visibility Distributions and Projective Color Mapping. *Computerized Medical Imaging and Graphics* **37**(7–8), 450–458. doi: 10.1016/j.compmedimag.2013.08.008.
12. Nguyen*, B. P., W.-L. Tay, C.-K. Chui, and S.-H. Ong (2012). A Clustering-Based System to Automate Transfer Function Design for Medical Image Visualization. *The Visual Computer* **28**(2), 181–191. doi: 10.1007/s00371-011-0634-3.
13. Nguyen*, B. P., C.-K. Chui, S.-H. Ong, and S. Chang (2011). An Efficient Compression Scheme for 4-D Medical Images using Hierarchical Vector Quantization and Motion Compensation. *Computers in Biology and Medicine* **41**(9), 843–856. doi: 10.1016/j.combiomed.2011.07.003.
14. Wang, Z., B. P. Nguyen*, C.-K. Chui, J. Qin, C.-H. Ang, and S.-H. Ong (2010). An Efficient Clustering Method for Fast Rendering of Time-varying Volumetric Medical Data. *The Visual Computer* **26**(6–8), 1061–1070. doi: 10.1007/s00371-010-0483-5.

Papers in Conference Proceedings

1. Chen, X., B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2016). Automated Brain Tumor Segmentation using Kernel Dictionary Learning and Superpixel-level Features. In: *Proceedings of the International Conference on*

- Systems, Man, and Cybernetics (SMC Junior 2016)*. [Best Student Paper Award]. Budapest, Hungary: IEEE, pp.2547–2552.
2. Pratondo, A., B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2015). Pancreas Segmentation on Non-contrast-enhanced CT Scan Images. In: *Proceedings of the AUN/SEED-Net Regional Conference for Computer and Information Engineering*. Hanoi, Vietnam, pp.1–5.
 3. Chui, C.-K., B. P. Nguyen, and R. Wen (2014). Development of a Cognitive Engine for Balancing Automation and Human Control of Surgical Robotic System. In: *Proceedings of the 11th International Conference on Ubiquitous Robots and Ambient Intelligence (URAI 2014)*. Kuala Lumpur, Malaysia: IEEE, pp.13–17.
 4. Pratondo, A., B. P. Nguyen, C.-K. Chui, and S.-H. Ong (2014). Vocal Cord Segmentation from CT Images using Machine Learning. In: *Proceedings of the 10th Asian Conference on Computer Aided Surgery (ACCAS 2014)*. Fukuoka, Japan, pp.40–41.
 5. Wen, R., B. P. Nguyen, and C.-K. Chui (2014). Non-Rigid Organ Motion Tracking using Adaptive Shape Model. In: *Proceedings of the 10th Asian Conference on Computer Aided Surgery (ACCAS 2014)*. Fukuoka, Japan, pp.18–19.
 6. Chui, C.-K., B. P. Nguyen, and C.-B. Chng (2013). Intelligent Visual and Haptic Cues for Shared-control Microrobot-assisted Microsurgeries. In: *Proceedings of the 9th Asian Conference on Computer Aided Surgery (ACCAS 2013)*. Tokyo, Japan, pp.42–43.
 7. Wen, R., B. P. Nguyen, C.-B. Chng, and C.-K. Chui (2013). In Situ Spatial AR Surgical Planning Using Projector-Kinect System. In: *Proceedings of the Symposium on Information and Communication Technology (SoICT 2013)*. Vol. 836. ICPS. Danang, Vietnam: ACM, pp.164–171.
 8. Wu, J., C.-K. Chui, B. P. Nguyen, and C.-L. Teo (2013). Real-Time Rendering of Drugs Injection and Interactive Simulation of Vessel Deformation Using GPU. In: *Proceedings of 35th Annual International IEEE EMBS Conference (EMBS 2013)*. Osaka, Japan: IEEE, pp.4569–4572.
 9. Chui, C.-K., B. P. Nguyen, Y. Ho, Z. Wu, M. Nguyen, G.-S. Hong, D. Mok, S. Sun, and S. Chang (2012). Embedded Real-Time Model Predictive Control for Glucose Regulation. In: *Proceedings of the World Congress on Medical Physics and Biomedical Engineering (WC 2012)*. Ed. by M. Long. Vol. 39. IFMBE Proceedings. Beijing, China: Springer, pp.1437–1440.
 10. Ho, Y., B. P. Nguyen, and C.-K. Chui (2012). Ant Colony Optimization for Model Predictive Control for Blood Glucose Regulation. In: *Proceedings of the 3rd Symposium on Information and Communication Technology (SoICT 2012)*. Vol. 638. ICPS. Halong, Vietnam: ACM, pp.214–217.
 11. Le, D.-P. and B. P. Nguyen (2012). Fast Point Quadrupling on Elliptic Curves. In: *Proceedings of the 3rd Symposium on Information and Communication Technology (SoICT 2012)*. Vol. 638. ICPS. Halong, Vietnam: ACM, pp.218–222.
 12. Nguyen, B. P., Y. Ho, Z. Wu, and C.-K. Chui (2012). Implementation of Model Predictive Control with Modified Minimal Model on Low-power RISC Microcontrollers. In: *Proceedings of the 3rd Symposium on Information and Communication Technology (SoICT 2012)*. Vol. 638. ICPS. Halong, Vietnam: ACM, pp.165–171.
 13. Nguyen, B. P., W.-L. Tay, C.-K. Chui, and S.-H. Ong (2011). Automatic Transfer Function Design for Volumetric Data Visualization using Clustering on LH Space. In: *Proceedings of Computer Graphics International 2011 (CGI 2011)*. Ottawa, Ontario, Canada, pp.1–10.
 14. Do, T. T. T., T. M. Le, B. P. Nguyen, and Y. Ha (2010). Performance-Cost Analyses Software for H.264 Forward/Inverse Integer Transform. In: *Proceedings of the 21st IEEE International Symposium on Rapid System Prototyping (RSP 2010)*. Fairfax, Virginia, USA: IEEE, pp.1–7.
 15. Do, T. T. T. and B. P. Nguyen (2010). A High-Accuracy and High-Speed 2-D 8×8 Discrete Cosine Transform Design. In: *Proceedings of the 1st International Conference on Green Computing and the 2nd AUN/SEED-Net Regional Conference on ICT (ICGC-RCICT 2010)*. Yogyakarta, Indonesia, pp.135–139.
 16. Nguyen, B. P. and T. T. T. Do (2010). Cross Directional Rectangle Search for Fast Block-Matching Motion Estimation. In: *Proceedings of the 1st International Conference on Green Computing and the 2nd AUN/SEED-Net Regional Conference on ICT (ICGC-RCICT 2010)*. Yogyakarta, Indonesia, pp.132–134.
 17. Nguyen, B. P., T. T. T. Do, C.-K. Chui, and S.-H. Ong (2010). Prediction-based Directional Search for Fast Block-Matching Motion Estimation. In: *Proceedings of the 1st Symposium on Information and Communication Technology (SoICT 2010)*. Vol. 449. ICPS. Hanoi, Vietnam: ACM, pp.86–91.
 18. Qin, J., W.-M. Pang, B. P. Nguyen, D. Ni, and C.-K. Chui (2010). Particle-Based Simulation of Blood Flow and Vessel Wall Interactions in Virtual Surgery. In: *Proceedings of the 1st Symposium on Information and Communication Technology (SoICT 2010)*. Vol. 449. ICPS. Hanoi, Vietnam: ACM, pp.128–133.

19. Li, B. N., P. B. Nguyen, J. Qin, L. Yang, S.-H. Ong, S. Chang, and C.-K. Chui (2009). Image Processing and Modeling for Active Needle Steering in Liver Surgery. In: *Proceedings of the International Asia Conference on Informatics in Control, Automation and Robotics 2009 (CAR 2009)*. Bangkok, Thailand: IEEE, pp.1–5.
20. Nguyen, B. P., C.-K. Chui, S.-H. Ong, and S. Chang (2009). Vascular Flow Rendering for Interactive Simulation of Contrast and Drugs Injection. In: *Proceedings of the IEEE Region 10 Conference 2009 (TENCON 2009)*. Singapore: IEEE, pp.1–5.
21. Nguyen, P. B., T. Yang, F. Leong, S. Chang, S.-H. Ong, and C.-K. Chui (2008). Patient Specific Biomechanical Modeling of Hepatic Vasculature for Augmented Reality Surgery. In: *Proceedings of the 4th International Workshop on Medical Imaging and Augmented Reality (MIAR 2008)*. Tokyo, Japan, pp.1–9.

Posters and Abstracts

1. Heemskerk, H., N. S. Jagannathan, B. P. Nguyen, K. Sacadevan, P. Matsudaira, P. T. So, and L. Tucker-Kellogg (2018). Contribution of Individual Satellite Cells to Muscle Regeneration Assessed Using a Confetti Mouse Model. In: *the 30th Annual Meeting of the Wound Healing Society*. Vol. 26. Wound Repair and Regeneration 1. [Abstract]. North Caronila, USA: Wiley, pp.A17.
2. Heemskerk, H., B. P. Nguyen, P. T. Matsudaira, P. T. C. So, and L. Tucker-Kellogg (2017). “Measuring Muscle Injury and Regeneration to Classify Pressure Ulcers”. In: *SMART BioSyM Annual Workshop*. [Poster]. NUS, Singapore.
3. Nguyen, B. P., H. Heemskerk, P. T. C. So, and L. Tucker-Kellogg (2017). “Microscopy Image Analysis for Muscle Stem Cell Regeneration in Confetti-Fluorescent Mice”. In: *SMART BioSyM Annual Workshop*. [Poster]. NUS, Singapore.
4. Nguyen, B. P., H. Heemskerk, P. T. C. So, and L. Tucker-Kellogg (2016). “Analysis of Tissue Microscopy and Simulation of Cellular Dynamics during Stem Cell Regeneration in Skeletal Muscle”. In: *SMART BioSyM Annual Workshop*. [Poster]. NUS, Singapore.
5. Nguyen, B. P., H. Heemskerk, P. T. C. So, and L. Tucker-Kellogg (2016). “Superpixel-based Segmentation of Muscle Fibers in Multi-channel Microscopy”. In: *BioImage Informatics Conference*. [Poster Prize]. Biopolis, Singapore.
6. Tucker-Kellogg, L., J. Heemskerk, P. So, P. Matsudaira, B. Nguyen, and K. D. Sacadevan (2016). Confetti Fluorescence Displays Muscle Regeneration from Satellite Cells in vivo: A Novel Platform for Assessing Stem Cell Function Intravitaly. In: *the 28th Annual Meeting of the Wound Healing Society*. Vol. 24. Wound Repair and Regeneration 2. [Abstract]. Atlanta, GA, USA: Wiley, pp.A26.
7. Goh, J.-J., B. P. Nguyen, C.-K. Chui, and W.-H. Ng (2015). “Predicting Optimal Craniotomy Opening Area using Support Vector Machine to Reduce Incidence of Brain Herniation Post Durotomy”. In: *Neuroscience Academic Clinical Program Research Day*. [Abstract - Gold Award]. Singapore: The National Neuroscience Institute of Singapore.
8. Nguyen, B. P., L. Cai, X. Chen, S.-H. Ong, and C.-K. Chui (2015). “GPU Accelerated Knowledge Discovery for Importance-Driven Medical Volume Visualization”. In: *GPU Technology Conference Asia South*. [Poster]. Singapore: NVIDIA Singapore.
9. Nguyen, B. P. and L. Tucker-Kellogg (2015). “Vesicle Detection in Video Microscopy”. In: *the 7th Annual DUNES (DUKE-NUS Early Career Scientists Association) Symposium*. [Poster]. Duke-NUS Medical School, Singapore.
10. Nguyen, B. P., R. Wen, L. Cai, J. Wu, S.-H. Ong, C.-L. Teo, and C.-K. Chui (2015). “Accelerated Medical Computing Toolkit and GPU Accelerated Importance-driven Volume Visualization”. In: *GPU Technology Conference (GTC 2015)*. [Poster]. San Jose, California, USA: NVIDIA Corporation.
11. Nguyen, B. P., L. Cai, C.-K. Chui, and S.-H. Ong (2014). “GPU Accelerated Transfer Function Generation for Importance-Driven Volume Visualization”. In: *GPU Technology Workshop South East Asia*. [Best Poster Award]. Singapore: NVIDIA Singapore.
12. Nguyen, B. P., R. Wen, L. Cai, J. Wu, A. Pratondo, G. Ujjaval, and C.-K. Chui (2014). “Accelerated Computing Toolkit for Medical Simulation”. In: *GPU Technology Workshop South East Asia*. [Poster]. Singapore: NVIDIA Singapore.

Professional Activities

Editorial Service

- Editorial Board Member, *Computers in Biology and Medicine*, Elsevier (since 2018).

- Editorial Board Member, *EAI Endorsed Transactions on Ambient Systems*, European Alliance for Innovation (since 2017).

Publication Committee Member, Program Committee Member and Session Co-Chair

- The 11th Anniversary Asian Conference on Computer Aided Surgery (ACCAS 2015), Singapore.

Advisory Committee Member

- International Conference on Recent Trends in Computing, Power, Communication and Control Technologies (ICRTCPCT 2019), 14-15 June 2019, Mysuru, India.

Program Committee Member

Have been serving as a program committee member for more than 60 international conferences since 2014.

List of selected conferences is as below.

- The 12th International Conference on Health Informatics (HEALTHINF 2019), 22-24 Feb, Prague, Czech Republic.
- The 1st IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR 2018), 10-12 Dec 2018, Taichung, Taiwan.
- The 9th Symposium on Information and Communication Technology (SoICT 2018), 6-7 Dec 2017, Da Nang, Vietnam.
- The 7th International Conference on Mechatronics and Control Engineering (ICMCE 2018), 27-29 Nov 2018, Amsterdam, Netherlands.
- The 7th EAI International Conference on Context-Aware Systems and Applications (ICCASA 2018), 22-23 Nov 2018, Viet Tri, Vietnam.
- The 5th International Conference on Biomedical and Bioinformatics Engineering (ICBBE 2018), 12-14 Nov 2018, Okinawa, Japan.
- The 4th International Conference on Science, Engineering and Environment (SEE-NAGOYA 2018), 12-14 Nov 2018, Nagoya, Japan.
- International Conference on Data Science, E-learning and Information Systems (Data'18), 1-2 Oct 2018, Madrid, Spain.
- The 39th International Conference on Information Systems Architecture and Technology (ISAT 2018), 16-18 Sep 2018, Nysa, Poland.
- The 4th International Conference on Machine Learning, Optimization, and Data Science (LOD 2018), 13-16 Sep 2018, Volterra, Tuscany, Italy.
- The 15th International Conference on Signal Processing and Multimedia Applications (SIGMAP 2018), 26-28 Jul 2018, Porto, Portugal.
- The 19th IEEE International Conference on Information Reuse and Integration for Data Science (IRI 2018), 7-9 Jul 2018, Salt Lake City, Utah, USA.
- International Conference on Data Science and Intelligent Analysis of Information (ICDSIAI 2018), 4-7 Jun 2018, Kiev, Ukraine.
- The International Conference on Artificial Intelligence & Human Computer Interaction (ICAIHCI 2018), 29-30 May 2018, Frankfurt, Germany.
- The 11th International Conference on Health Informatics (HEALTHINF 2018), 19-21 Jan, Madeira, Portugal.
- International Conference on Big Data and Internet of Thing (BDIOT 2017), 20-22 Dec 2017, London, United Kingdom.
- The 8th Symposium on Information and Communication Technology (SoICT 2017), 7-8 Dec 2017, Nha Trang, Vietnam.
- The 6th International Conference on Mechatronics and Control Engineering (ICMCE 2017), 2-4 Dec 2017, St. Petersburg, Russia.
- The 8th EAI International Conference on Big Data Technologies and Applications (BDTA 2017), 23-24 Nov 2017, Gwangju, South Korea.
- The 6th EAI International Conference on Context-Aware Systems and Applications (ICCASA 2017), 23-24 Nov 2017, Tam Ky, Vietnam.
- The 3rd International Conference on Science, Engineering and Environment (SEE-USQ 2017), 13-16 Nov 2017, Brisbane, Australia.

- The 4th International Conference on Biomedical and Bioinformatics Engineering (ICBBE 2017), 12-14 Nov 2017, Seoul, South Korea.
- The 2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2017), 5-8 Oct 2017, Banff, Canada.
- The International Symposium on Intelligent Unmanned Systems and Artificial Intelligence (SIUSAI 2017), 22-24 Sep 2017, Osaka, Japan.
- The 2nd International Conference on Applied Mathematics and Data Science (ICAMDS 2017), 27-28 Apr 2017, Xi'an, China.
- The 7th Symposium on Information and Communication Technology (SoICT 2016), 8-9 Dec 2016, Hochiminh, Vietnam.
- The 5th EAI International Conference on Context-Aware Systems and Applications (ICCASA 2016), 24-25 Nov 2016, Thu Dau Mot, Vietnam.
- The 2nd International Conference on Science, Engineering and Environment (SEE-Osaka 2016), 21-23 Nov 2016, Osaka, Japan.
- The International Conference on Artificial Intelligence and Cognitive Computing (AICC 2016), 21-23 Oct 2016, Greater Noida, India.
- The 2016 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2016 Junior), 9-12 Oct 2016, Budapest, Hungary.
- The 6th Symposium on Information and Communication Technology (SoICT 2015), 3-4 Dec 2015, Hue, Vietnam.
- The 1st International Conference on Science, Engineering and Environment (SEE-Mie 2015), 19-21 Nov 2015, Mie, Japan.
- The 5th Symposium on Information and Communication Technology (SoICT 2014), 4-5 Dec 2014, Hanoi, Vietnam.

Doctoral Thesis Reviewer

- A Ph.D. thesis about automated scene understanding from aerial imagery, Queensland University of Technology, Australia, 2017.
- A Ph.D. thesis about abnormal event detection in video surveillance, Queensland University of Technology, Australia, 2016.

Reviewer for International Journals

- IEEE Transactions on Human-Machine Systems, IEEE Journal of Biomedical and Health Informatics, IEEE Transactions on Mechatronics, IEEE Access, Computers in Biology and Medicine, Information Fusion, Knowledge-Based Systems, Biomedical Signal Processing and Control, International Journal of Computer Assisted Radiology and Surgery, International Journal of Cardiovascular Imaging, Circuits, Systems & Signal Processing, Journal of Intelligent & Fuzzy Systems, Big Data, MDPI Journals: Applied Sciences, Entropy, Journal of Imaging, Technologies, Sustainability, Sensors, International Journal of Geo-Information, etc.
- Awarded *Top (1%) Reviewers for Computer Science* - Publons (September 2018)
- Awarded *Outstanding reviewer* - Knowledge-Based Systems (July 2018)
- Awarded *Outstanding reviewer* - Computers in Biology and Medicine (May 2018)
- My Publons profile: <https://publons.com/a/1332846/>

Invited Talks

- **Medical Data Analytics, Visualization, and Augmented Reality**, School of Mathematics and Statistics, Victoria University of Wellington, New Zealand, May 2017.

Selected Software/Apps/Games

2016	Monster World – Fire	bigame (Vietnam)
	<ul style="list-style-type: none"> • A pocket monster RPG game on Android. More than 1,000,000 installations from Google Play. • Developed an advanced anti-crack module for the game. 	
2015	Journey to the West – Flaming Mountains	bigame (Vietnam)

- A mobile game on Android inspired by one of the Four Great Classical Novels of Chinese literature. About 500,000 installations from Google Play.
 - Generated intelligent behaviors in non-player characters.
- 2006 **SISU** Anh Dao company (Vietnam)
- Sale management software for the sole distributor in Vietnam for Kangnai Group, a leading shoes manufacture in China.
- 2005 **BackUp Adapter (BUA)** Auto Recovery Technology Corporation (Japan)
- A hardware-software solution that helps users to backup data from their mobile phones to our innovative device or PCs, and allows them to edit and restore data back to their phones. The product then won the 2nd **prize** in the national software contest “Vietnam Intelligence 2006”.
 - Developed the communication module between PCs and mobile phones.
- 2004 **<http://bachkim.vn>** Platin JSC. (Vietnam)
- Designed and implemented a website for a leading educational software company in Vietnam.
- 2002–2004 **Educational Software for Lower Secondary Schools**
- Developed a series of teaching-aid software for teachers in lower secondary schools, which was a part of the “Lower Secondary Education Development Project” operated by the Ministry of Education and Training.
 - Co-authored the software entitled “Visual and Online Lesson Editor for Teachers (ViOLET)” which won the 3rd **prize** in the national software contest “Vietnam Intelligence 2005”, and the 2nd **prize** in the contest “Science and Technology Creative Products 2005” for the 50th anniversary of HUST.
- 2002–2004 National project: **Advanced Systems and Human-Machine Interaction** SoICT, HUST
- Analyzed, designed and implemented the “Test and Examination System (TES)” for the sub-project “Bach Khoa Virtual Interactive Educational Web-based System (BKviews)”.
 - Developed a Vietnamese speech recognition system for the sub-project “Speech-based Human-Machine Interaction”.
- 2002 **Information Collecting and Parsing System (ICPS)**
- A system that helps users to collect information from any source on the Internet.
 - Won the 2nd **prize** in the national software contest “Vietnam Intelligence 2002”.