Tam V. Nguyen

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Department of Computer Science

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Education

- 2011–2013 PhD., National University of Singapore (NUS), Singapore.
 - Department of Electrical and Computer Engineering
 - Advisor: Prof. Shuicheng Yan
- 2007–2009 M.Eng., Chonnam National University, South Korea.
 - Department of Electronics and Computer Engineering
 - o Advisor: Prof. Deokjai Choi
 - o Rank: 1/50
- 2001–2005 BSc., University of Science, Vietnam.
 - Department of Software Engineering
 - o Advisor: Prof. Duc Anh Duong and Prof. Minh-Triet Tran
 - o Rank: 1/250

Professional Appointments

08/2016– **Assistant Professor (tenure-track)**, *Department of Computer Science*, University of present Dayton (UD).

Deliver lectures in programming, data structures, data visualization, visual computing and mixed reality, image processing, artificial intelligence and deep learning

Conduct research on artificial intelligence, computer vision, machine learning, deep learning, virtual/augmented reality

Write research proposals for funding.

- 12/2013 Research Scientist, Applied Research & Technology for Infocomm Centre, Singapore
- 07/2016 Polytechnic, Singapore.

Lead and manage research projects in ARTIC centre, conduct research on computer vision (image parsing, action recognition, visual saliency, and face analysis), machine learning (attribute learning, applied deep learning), augmented reality and multimedia Write proposals for funding from various agencies.

- 12/2014 Adjunct Lecturer, National University of Singapore, Singapore.
- 07/2016 Deliver lectures of EE5907R Pattern Recognition class
- 07/2013 Postdoc Researcher, National University of Singapore, Singapore.
- 12/2013 Conduct research on computer vision, machine learning, and multimedia
- 01/2011 Graduate Teaching Assistant, National University of Singapore, Singapore.
- 07/2013 Teaching Assistant in EE2024 Programming for Computer Interfaces
- 07/2010- Research Engineer, National University of Singapore, Singapore.
- 01/2011 Do project on computer vision and augmented reality, especially in natural feature tracking
- 06/2009- Senior Software Engineer, Harvey Nash, Vietnam.
- 07/2010 Collaborate with Alcatel Lucent on programming NodeB base station
- 03/2007- Research Assistant, Chonnam National University, South Korea.
- 03/2009 Conduct research on smart home and ubiquitous computing
- 08/2005- Assistant Lecturer, University of Science, Vietnam.
- 02/2007 Deliver lectures in programming, data structure, and software engineering courses

Funded Research Grants

- 08/2020 Principal Investigator, EAGER: Crowd-AI Sensing Based Traffic Analysis for HCMC 07/2022 Planning Simulation. National Science Foundation (NSF) - \$248,000 08/2020 - **Principal Investigator**, AI-assisted system for crystal growth. 08/2021 Lam Research - \$25,000 05/2020 - Principal Investigator, A retargeting framework for human detection in the distracted 08/2020 environment. UD Research Council Seed Grant – \$6,500 10/2019 - Senior Personnel, Large-scale Visual Data Annotation Platform for Artificial Intelligence 09/2022 Applications. Vingroup Innovation Foundation (VINIF) – \$280,000 05/2019 - Co-Principal Investigator, Developing Number E-Books Using Adaptive Technology. 05/2020 UD STEM Catalyst Grant - \$37,085 05/2019- Principal Investigator, Mixed Reality Application for Non-Destructive Evaluation 08/2019 *Training*. UDRI and College of Arts and Sciences Fellowship - \$13,500 05/2018- Principal Investigator, A deep learning based framework for camouflaged object 08/2018 detection. UD Research Council Seed Grant – \$6,500 05/2017 - Principal Investigator, A framework for object segment collage CAPTCHA. 05/2018 UD STEM Catalyst Grant - \$14,405 08/2017 - Principal Investigator, Visual Computing and Mixed Reality. 12/2017 UD Experiential Learning Innovation Fund 04/2017 – Principal Investigator, Deep Learning with GPUs. 07/2017 NVIDIA GPU Grant
- 2016–2018 **Principal Investigator**, *DRIS: Dual Reality Interactive Simulator*. Singapore Ministry of Education S\$313,076
- 2015–2017 **Principal Investigator**, *Mobile Augmented Reality Interactive Manual*. Singapore Ministry of Education \$\$326,000
- 2013–2015 **Co-Principal Investigator**, *IOTVIC: Internet of Things Video Cloud for Education*. Singapore Ministry of Education S\$266,000

Selected Publications

Full publication on Google Scholar: https://scholar.google.com/citations?user=qIaGn7YAAAAJ

Book Chapter

1. Edy Portmann, **Tam V. Nguyen**, Jose Sepulveda, Adrian David Cheok, "Fuzzy Online Reputation Analysis Framework", Fuzzy Methods for Customer Relationship Management and Marketing: Applications and Classification. **IGI Global** (book chapter), pp. 117-140, 2013

Journal Articles

- 2. Dhaval Kadia, Md Zahangir Alom, Ranga Burada, **Tam V. Nguyen**, Vijayan Asari. "R2U3D: Recurrent Residual 3D U-Net for Lung Segmentation", IEEE Access, Vol.9, pp. 88835-88843, 2021, IF = 3.745 (**SCIE**).
- 3. **Tam V. Nguyen**, Somaraju Kamma, Vamsi Adari, Tyler Lesthaeghe, Thomas Boehnlein, Victoria Kramb.. "Mixed Reality System for Non-Destructive Evaluation Training", Journal of Virtual Reality, (**VIRE**),

- 2021, IF = 3.634 (SCIE).
- 4. Jinnan Yan, Trung-Nghia Le, Khanh-Duy Nguyen, Minh-Triet Tran, Thanh-Toan Do, **Tam V. Nguyen**. "MirrorNet: Bio-Inspired Camouflaged Object Segmentation", IEEE Access, Vol. 9, pp. 43290 43300, 2021, IF = 3.745 (**SCIE**).
- 5. Yousef I Mohamad, Samah S Baraheem, **Tam V. Nguyen**. "Olympic Games Event Recognition via Transfer Learning with Photobombing Guided Data Augmentation", Journal of Imaging, Vol. 7, 12 pages, 2021 (**E-SCI**).
- 6. Tuan Hoang, Thanh-Toan Do, **Tam V. Nguyen**, Ngai-Man Cheung. "Unsupervised Deep Cross-modality Spectral Hashing", IEEE Transactions on Image Processing (**T-IP**), 2020, IF = 9.34 (**SCI**).
- 7. Samah Baraheem, **Tam V. Nguyen**. "Text-to-image via mask anchor points", Pattern Recognition Letters (**PRL**), Vol. 133, pp. 25-32, 2020, IF = 2.81 (**SCI**).
- 8. **Tam V. Nguyen**, Zhe Huang, Saiteja Bethini, Venkata Prasanth, Phu. H. Phung. "Secure CAPTCHAS via Object Segment Collage", IEEE Access, Vol. 8, pp. 84230 84238, 2020, IF = 4.098 (**SCIE**).
- 9. Khang Nguyen, Nhut T. Huynh, Phat C. Nguyen, Khanh-D. Nguyen, Nguyen D. Vo, **Tam V. Nguyen**. "Detecting Objects from Space: An Evaluation of Deep Learning Modern Approaches", Journal of Electronics, Vol. 9, pp. 583:1-18, 2020, IF = 1.764 (**SCIE**).
- 10. Ly Vu, Kha Nguyen, **Tam V. Nguyen**, Tu Nguyen, Fabio Massacci, Phu H. Phung. "HIT4Mal: Hybrid image transformation for malware classification", Transactions on Emerging Telecommunications Technologies (ETT), 2020, IF = 1.258 (SCIE).
- 11. **Tam V. Nguyen**, Khanh Nguyen, Thanh-Toan Do. "Semantic Prior Analysis for Salient Object Detection", IEEE Transactions on Image Processing (**T-IP**), Vol. 28, Issue 6, pp. 3130-3141, 2019, IF = 6.79 (**SCI**).
- 12. Trung-Nghia Le, **Tam V. Nguyen**, Zhongliang Nie, Minh-Triet Tran, A. Sugimoto. "Anabranch Network for Camouflaged Object Segmentation.", Journal of Computer Vision and Image Understanding (**CVIU**), Vol. 184, pp. 45-56, 2019, IF = 2.645 (**SCI**).
- 13. Thanh-Toan Do, Tuan Hoang, Dang-Khoa Le, Huu Le, **Tam V. Nguyen**, Ngai-Man Cheung. "Simultaneous Feature Aggregating and Hashing for Compact Binary Code Learning.", IEEE Transactions on Image Processing (**T-IP**), Vol. 28, Issue 10, pp. 4954-4969, 2019, IF = 6.79 (**SCI**).
- 14. Khanh-Duy Nguyen, Khang Nguyen, Duy-Dinh Le, Duc Anh Duong, **Tam V. Nguyen**. "YADA: You Always Dream Again for Better Object Detection", Journal of Multimedia Tools and Applications (MTA), Vo. 78, No. 19, pp. 28189-28208, 2019, IF = 2.101 (SCIE).
- 15. Vinh-Tiep Nguyen, Duy-Dinh Le, Minh-Triet Tran, **Tam V. Nguyen**, Thanh D. Ngo, Shinichi Satoh, Duc A. Duong. "Video Instance Search via Spatial Fusion of Visual Words and Object Proposals", International Journal of Multimedia Information Retrieval (**IJMIR**), Vol. 8, Issue 3, pp. 181–192, 2019, IF = 2.2 (**E-SCI**).
- 16. Thanh-Toan Do, Tuan Hoang, Dang-Khoa Le, Huu Le, **Tam V. Nguyen**, Ngai-Man. Cheung."From selective deep convolutional features to compact binary representations for image retrieval", ACM Transactions on Multimedia Computing, Communications, and Applications (**TOMM**), Vol. 15, No. 2, pp. 43:1-43:22, 2019 IF = 2.019 (**SCIE**).
- 17. Khanh-Duy Nguyen, Khang Nguyen, Duy-Dinh Le, Duc Anh Duong, **Tam V. Nguyen**. "You Always Look Again: Learning to Detect the Unseen Objects", Journal of Visual Communication and Image Representation (**JVCI**), Vol. 60, pp. 206-216, 2019 IF = 2.259 (**SCIE**).
- 18. **Tam V. Nguyen**, Qi Zhao, Shuicheng Yan. "Attentive Systems: A Survey", International Journal of Computer Vision (**IJCV**) Vol.126, No. 1, pp. 86–110, 2018, IF = 11.541 (**SCI**).
- 19. S. Ding, B. Mirza, Z. Lin, J. Cao, X. Lai, **Tam V. Nguyen**, J. Sepulveda. "Kernel based Online Learning for Imbalance Multiclass Classification", Neurocomputing, Vol.277, pp. 139–148, 2018 IF = 3.317 (**SCI**).
- 20. **Tam V. Nguyen**, B. Mirza. "Dual-layer Kernel Extreme Learning Machine for Action Recognition", Neurocomputing, Vol.260, pp. 123–130, 2017 IF = 3.317 (**SCI**).
- 21. **Tam V. Nguyen**, Mohan Kankanhalli. "As-Similar-As-Possible Saliency Fusion", Multimedia Tools and Applications (**MTA**), Vol. 76 Issue (8), pp. 10501-10519, 2017 IF = 1.530 (**SCIE**).

- 22. **Tam V. Nguyen**, Jose Sepulveda. "Augmented Immersion: Video Cutout and Gesture-guided Embedding for Gaming Applications", Multimedia Tools and Applications (**MTA**), Vol. 75, No. 20, pp. 12351-12363, 2016 IF = 1.346 (**SCIE**).
- 23. **Tam V. Nguyen**, Zheng Song, Shuicheng Yan. "STAP: Spatial-Temporal Attention-aware Pooling for Action Recognition", IEEE Transactions on Circuits and Systems for Video Technology (**T-CSVT**), Vol. 25, No. 1, pp. 77-86, 2015 IF = 2.615 (**SCI**).
- 24. **Tam V. Nguyen**, Canyi Lu, Jose Sepulveda, Shuicheng Yan. "Adaptive Nonparametric Image Parsing", IEEE Transactions on Circuits and Systems for Video Technology (**T-CSVT**), pp. 1565-1575, 2015 (**SCI**).
- 25. **Tam V. Nguyen**, Jiashi Feng, Shuicheng Yan. "Seeing Human Weight from a Single RGB-D Image", Journal of Computer Science and Technology (**JCST**), Vol. 29, No. 5, pp. 777-784, 2014 IF = 0.642 (**SCIE**).
- 26. Bingbing Ni, Mengdi Xu, **Tam V. Nguyen**, Congyan Lang, Zhongyang Huang, Meng Wang, Shuicheng Yan. "Touch Saliency: Characteristics and Prediction", IEEE Transactions on Multimedia (**T-MM**), Vol. 16, No. 6, pp. 1779-1791, 2014 IF = 1.776 (**SCIE**).
- 27. Yanxiang Chen, **Tam V. Nguyen**, Mohan Kankanhalli, Jun Yuan, Shuicheng Yan. "Audio Matters in Visual Attention", IEEE Transactions on Circuits and Systems for Video Technology (**T-CSVT**), Vol. 24, No. 11, pp. 1992-2003, 2014 IF = 2.259 (**SCI**).
- 28. **Tam V. Nguyen**, Bingbing Ni, Hairong Liu, Wei Xia, Jiebo Luo, Mohan Kankanhalli, Shuicheng Yan, "Image Re-Attentionizing", In IEEE Transactions on Multimedia (**T-MM**), Vol. 15, No. 8, pp. 1910-1919, 2013 IF = 1.935 (**SCIE**).
- 29. **Tam V. Nguyen**, Si Liu, Jun Tan, Bingbing Ni, Yong Rui, Shuicheng Yan. "Towards Decrypting Attractiveness via Multi-Modality Cues". In ACM Transactions on Multimedia Computing, Communications and Applications (**TOMM** formerly **TOMCCAP**), Vol. 9, No. 4, pp. 28:1-28:20, 2013 IF = 1.425 (**SCIE**.

Conference Proceedings

- 30. Tan-Cong Nguyen, Tien-Phat Nguyen, Gia-Han Diep, Anh-Huy Tran-Dinh, **Tam V. Nguyen**, Minh-Triet Tran. "CCBANet: Cascading Context and Balancing Attention for Polyp Segmentation". International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2021
- 31. Linh Truong Dieu, Thuan Trong Nguyen, Nguyen D. Vo, **Tam V. Nguyen**, Khang Nguyen. "Parsing Digitized Vietnamese Paper Documents". International Conference on Computer Analysis of Images and Patterns (**CAIP**), 2021.
- 32. Trung-Nghia Le, Vuong Nguyen, Cong Le, Tan-Cong Nguyen, Minh-Triet Tran, **Tam V. Nguyen**. "CamouFinder: Finding Camouflaged Instances in Images", AAAI Conference on Artificial Intelligence (AAAI), 2021.
- 33. Trung-Nghia Le, **Tam V. Nguyen**, Quoc-Cuong Tran, Lam Nguyen, Trung-Hieu Hoang, Minh-Quan Le, Minh-Triet Tran. "Interactive Video Object Mask Annotation", AAAI Conference on Artificial Intelligence (**AAAI**), 2021.
- 34. Tuan Hoang, Thanh-Toan Do, **Tam V. Nguyen**, Ngai-Man Cheung. "Direct Quantization for Training Highly Accurate Low Bit-width Deep Neural Networks", International Joint Conference on Artificial Intelligence (**IJCAI**), pp. 2111–2118, 2020.
- 35. Samah Baraheem, Trung-Nghia Le, **Tam V. Nguyen**, Ngai-Man Cheung. "Text-to-Image Synthesis via Aesthetic Layout", ACM Multimedia Conference (**ACM MM**), pp. 4485–4487, 2020.
- 36. An Quan, Tiep Nguyen, Cong Nguyen, **Tam V. Nguyen**, Minh-Triet Tran. "Flood Level Prediction via Human Pose Estimation from Social Media Images", ACM International Conference on Multimedia Retrieval (**ICMR**), pp. 479–485, 2020.
- 37. Samah Baraheem, **Tam V. Nguyen**. "Aesthetic-Aware Text to Image Synthesis", 54th Annual Conference on Information Sciences and Systems (**CISS**), pp. 1–6, 2020.
- 38. Quynh M. Chung; Tien D. Le; Thin V. Dang; Nguyen D. Vo, **Tam V. Nguyen**, Khang Nguyen. "Data Augmentation Analysis in Vehicle Detection from Aerial Videos", International Conference of Research,

- Innovation and Vision for the Futur (RIVF), 2020.
- 39. Xiang Chen, **Tam V. Nguyen**, Zhiqi Shen, Mohan Kankanhalli. "LiveSense: Contextual Advertising in Live Streaming Videos", ACM Multimedia Conference (**ACM MM**), pp. 392–400, 2019.
- 40. Thomas Sherk, Minh-Triet Tran, **Tam V. Nguyen**. "SharkTank Deal Prediction: Dataset and Computational Model", International Conference on Knowledge and Systems Engineering (**KSE**), pp. 248–253, 2019.
- 41. Zhongliang Nie, Akhil Mattey, Zhe Huang, **Tam V. Nguyen**. "Revisit of Region-Feature Combinations in Facial Analysis", IEEE International Conference on Systems, Man, and Cybernetics (**SMC**), 2018, pp. 2343–2348.
- 42. **Tam V. Nguyen**, Jiashi Feng, Khang Nguyen. "Denser Trajectories of Anchor Points for Action Recognition", International Conference on Ubiquitous Information Management and Communication (**IMCOM**), 2018, pp. 1:1-1:8.
- 43. **Tam V. Nguyen**, Luoqi Liu. "Salient Object Detection with Semantic Priors", International Joint Conference on Artificial Intelligence (**IJCAI**), 2017, pp. 4499-4505.
- 44. **Tam V. Nguyen**, Guangyu Gao. "Novel Evaluation Metrics for Seam Carving based Image Retargeting", International Conference on Image Processing (**ICIP**) 2017, pp. 450–454.
- 45. **Tam V. Nguyen**, Luoqi Liu. "Smart Mirror: Intelligent Makeup Recommendation and Synthesis", **ACM Multimedia** 2017, pp. 1253–1254.
- 46. Zhe Huang, Vamshi Madaram, Saad Albadrani, **Tam V. Nguyen**. "Shadow Puppetry with Robotic Arms", ACM Multimedia Conference (ACM MM) 2017, pp. 1251–1252.
- 47. **Tam V. Nguyen**, Luoqi Liu, Khang Nguyen. "Image Parsing with Global-to-Local Convolutional Neural Networks", International Conference on Control, Automation, Robotics and Vision (**ICARCV**) 2016, pp. 1–6.
- 48. **Tam V. Nguyen**, Dorothy Tan, Jose Sepulveda. "MARIM: Mobile Augmented Reality for Interactive Manuals", ACM Multimedia 2016.
- 49. Erik Cambria, **Tam V. Nguyen**, Brian Cheng, Kenneth Kwok, Jose Sepulveda. "GECKA3D: A 3D Game Engine for Commonsense Knowledge Acquisition", AAAI Florida Artificial Intelligence Research Society Conference (**FLAIRS**) 2016, pp. 299–303.
- 50. **Tam V. Nguyen**, Jose Sepulveda. "Salient Object Detection via Augmented Hypotheses", International Joint Conference on Artificial Intelligence (**IJCAI**), pp. 2176-2182, 2015.
- 51. Kang Wang, **Tam V. Nguyen**, Jiashi Feng, Jose Sepulveda. "Sense Beyond Expressions: Cuteness", pp. 1067-1070, **ACM Multimedia 2015**.
- 52. **Tam V. Nguyen**. "Salient Object Detection via Objectness Proposals", *in Proceedings of* AAAI Conference on Artificial Intelligence (**AAAI**), pp. 4286-4287, 2015.
- 53. Xiang Chen, **Tam V. Nguyen**, Mohan Kankanhalli. "SalAd: A Multimodal Approach for Contextual Video Advertising", IEEE International Symposium on Multimedia (**ISM**), pp. 211-216, 2015.
- 54. **Tam V. Nguyen**, Mengdi Xu, Guangyu Gao, Mohan Kankanhalli, Qi Tian, Shuicheng Yan. "Static Saliency vs. Dynamic Saliency: A Comparative Study", **ACM Multimedia 2013**, pp. 987-996.
- 55. **Tam V. Nguyen***, Congyan Lang*, Harish Katti, Karthik Yadati, Mohan Kankanhalli, Shuicheng Yan, "Depth Matters: Influence of Depth Cues on Visual Saliency", European Conference on Computer Vision (**ECCV**) 2012, pp. 101-115. (* indicates equal contribution).
- 56. **Tam V. Nguyen**, Si Liu, Bingbing Ni, Jun Tan, Yong Rui, Shuicheng Yan, "Sense Beauty via Face, Dressing, and/or Voice", **ACM Multimedia 2012**, pp. 239-248.
- 57. Si Liu, Tam V. Nguyen, Jiashi Feng, Meng Wang, Shuicheng Yan, "Hi, Magic Closet, Tell Me What to Wear!", in Proceedings of ACM Multimedia 2012, pp. 1333-1334, Best technical demo award Award link: http://www.sigmm.org/archive/MM/mm12/www.acmmm12.org/awards/index.html (There are 51 papers in this track: http://dblp.uni-trier.de/db/conf/mm/mm2012.html).
- 58. **Tam V. Nguyen**, Lusong Li, Jun Tan, Shuicheng Yan, "3DME: 3D Media Express from RGB-D Images", in *Proceedings of ACM Multimedia* **2012**, pp. 1331-1332.

Workshop Papers

- 60. Minh-Triet Tran, **Tam V. Nguyen** *et al.* "iTASK Intelligent Traffic Analysis Software Kit.", CVPR Workshops (CVPRW), 2020, pp 2607–2616.
- 61. Minh-Triet Tran, Trung-Hieu Hoang, **Tam V. Nguyen** *et al.* "Multi-Referenced Guided Instance Segmentation Framework for Semi-supervised Video Instance Segmentation", DAVIS Video Object Segmentation Challenge Workshop in (**CVPR**), 2020, pp 1–4.
- 62. Minh-Triet Tran, Trung-Nghia Le, **Tam V. Nguyen** *et al.* "Guided Instance Segmentation Framework for Semi-supervised Video Instance Segmentation", DAVIS Video Object Segmentation Challenge Workshop in (**CVPR**), 2019, pp 1–4.
- 63. Minh-Triet Tran *et al.*, **Tam V. Nguyen**. "Context-based Instance Segmentation in Video Sequences", DAVIS Video Object Segmentation Challenge Workshop in (**CVPR**), 2018, pp 1–4.
- 64. Trung-Nghia Le *et al.*, **Tam V. Nguyen**. "Instance Re-Identification Flow for Video Object Segmentation", DAVIS Video Object Segmentation Challenge Workshop in (**CVPR**), 2017, pp 1–6.
- 65. **Tam V. Nguyen**, Yonghe Tan, Jose Sepulveda. "GACE: Gesture and Appearance Cutout Embedding for Gaming Applications", **ACM Multimedia 2014** Workshop in Immersive Media Experiences, pp. 41-44.

Teaching

- CPS 501 Advanced Programming & Data Structures (Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019)
- CPS 563 Data Visualization (Spring 2017, Summer 2017, Spring 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020)
- o CPS 564 Visual Computing and Mixed Reality (Fall 2016, Fall 2017, Fall 2018, Fall 2019)
- CPS 566 Image Processing (Spring 2020)
- CPS 584 Advanced Intelligent Systems & Deep Learning (Summer 2018, Summer 2019)
- o CPS 149 Creative Media Applications (Fall 2020)

Professional Services

- Program Committee Member: AAAI Conference on Artificial Intelligence, ACM Multimedia, ACM International Conference on Multimedia Retrieval, IEEE International Conference on Advanced Communications Technology, International Symposium on Information and Communication Technology
- Journal Reviewer:
- IEEE: Transactions on Pattern Analysis and Machine Intelligence, Transactions on Multimedia, Transactions on Cybernetics, Transactions on Circuits and Systems for Video Technology, Transactions on Neural Networks and Learning Systems, Transactions on Affective Computing, IEEE Access
- ACM: Transactions on Multimedia Computing, Communications and Applications, Transactions on Intelligent Systems and Technology
- Springer: Artificial Intelligence Review, Multimedia Systems Journal, The Visual Computer, Journal of Ambient Intelligence and Humanized Computing
- Elsevier: Computer Vision and Image Understanding, Pattern Recognition Letters, Neurocomputing, Journal of Visual Communication and Image Representation, Expert Systems with Applications.
- MDPI: Electronics, Remote Sensing, Sensors, Symmetry, Applied Sciences, Data, Information.
- University:
 - International Collegiate Programming Contest (ICPC) University Coach
 - University Hackathon Organizer
 - Department Faculty Search Committee Member

Honors and Awards

- 2021 Ravi Pallerla Memorial Award for Young Professionals, IEEE Dayton Section, USA.
- 2020 3rd Prize, CVPR 2020 contest of "Human Portrait Segmentation Challenge", USA.

- 2020 4th Prize, CVPR 2020 contest of "DAVIS Video Object Segmentation Challenge", USA.
- 2019 3rd Prize, CVPR 2019 contest of "DAVIS Video Object Segmentation Challenge", USA.
- 2018 **Jolly Jumper Prize**, 2018 ICPC East Central North America Regional Programming Contest, USA.
- 2017 3rd Prize, CVPR 2017 contest of "DAVIS Video Object Segmentation Challenge", USA.
- 2016 IEEE Senior Member.
- 2015 Singapore Polytechnic R&D Commendation Award, Singapore Polytechnic, Singapore.
- 2013 Best Paper Award, NUS-GSS, Singapore.
- 2012 Best Technical Demonstration, ACM Multimedia Conference 2012, Japan.
- 2012 Student Travel Grant, ACM Multimedia Conference 2012, Japan.
- 2012 2nd Prize, ICPR 2012 contest of "Scene Context based Gesture Recognition", Japan.
- 2011 2013 NUS Research Scholarship, National University of Singapore, Singapore.
- 2007 2009 IITA (Institute of Information Technology Assessment) Scholarship, South Korea.