Haiping Lu

PRESENT APPOINTMENT	Senior Lecturer in Machine Learning AI Strategy Lead Department of Computer Science Insigneo Healthcare Data/AI Research Director The University of Sheffield	☎ Office: +44 (0) 114 222 1853 ✉ Email: h.lu@sheffield.ac.uk 🌐 Web: https://haipinglu.github.io/ ⌨ GitHub: https://github.com/haipinglu ▶ YouTube: https://www.youtube.com/c/haipinglu

RESEARCH INTERESTS

◇ Machine learning, deep learning, tensor-based model, data integration, interpretability

◇ Medical image analysis, graph analysis, bioinformatics, computer vision

EDUCATION & PROFESSIONAL QUALIFICATION

◇ Fellow of the Higher Education Academy (FHEA), UK, 2018

◇ PhD in Electrical & Computer Engineering, University of Toronto, Canada, 2008

◇ MEng in Electrical & Electronic Engineering, Nanyang Technological University, Singapore, 2004

◇ BEng in Electrical & Electronic Engineering, Nanyang Technological University, Singapore, 2001

SELECTED AWARDS

◇ Turing Network Development Award 2021, Alan Turing Institute, UK (as PI).

◇ NIHR AI in Health and Care Award 2020, National Institute for Health Research, UK (as Co-I).

◇ Wellcome Trust Innovator Awards: Digital Technologies 2019, UK (jointly with Swift).

◇ Amazon Research Award 2018: among 83 international awardees.

◇ AAAI-18 Outstanding Program Committee Member Award, Association for the Advancement of Artificial Intelligence, US (20 awardees from 2,415 PC members of AAAI-18).

◇ 2014/15 Early Career Award, Research Grant Council (RGC), Hong Kong (22 out of 359).

◇ 2013 IEEE Computational Intelligence Society Outstanding PhD Dissertation Award.

STUDENT ACHIEVEMENTS

◇ The Fretwell-Downing Prize, for the best MSc dissertation in the Department of Computer Science, University of Sheffield: ▷ 1) Peizhen Bai, 2017; 2) Hao Xu, 2019.

PROFESSIONAL EXPERIENCE

◇ Senior Lecturer in Machine Learning, University of Sheffield. (Jan 2020 – present)

◇ Lecturer in Machine Learning, University of Sheffield. (Nov 2016 – Dec 2019)

◇ Assistant Professor in Computer Science, Hong Kong Baptist University. (Aug 2013 – Jul 2016)

◇ Scientist, Institute for Infocomm Research, A*STAR, Singapore. (Oct 2009 – Jul 2013)

◇ Post-doctoral fellow, Department of ECE, University of Toronto, Canada. (Sep 2008 – Aug 2009)

RESEARCH GRANTS

◇ Externally-funded research grants in the UK (Total: GBP 1,652,338)

▷ PI, Turing Network Development Award, GBP24,964, Alan Turing Institute, UK, Feb 2022 - Sep 2022.

▷ Co-PI, "Interactively trained 'human-in-the-loop' deep learning approach to improve cardiac CT and MRI assessment for accurate therapy response and mortality prediction", GBP 836,551, Artificial Intelligence in Health and Care Award, NIHR, UK, Mar 2021 - Feb 2023.

▷ Co-PI, "Developing a Machine Learning Tool to Improve Prognostic and Treatment Response Assessment on Cardiac MRI Data", GBP 639,873, Innovator Awards: Digital Technologies, Wellcome Trust, UK, Oct 2019 - Mar 2022.

▷ PI, "Learning Representations of Higher-Order Structures for Networks via Tensor Embedding", USD 71,000, Amazon Research Awards, Amazon, US, Apr 2019 - Mar 2020.

▷ PI, "Learning Sparse Features from 4D fMRI Data for Brain Disease Diagnosis", GBP 100,730, First Grant, EPSRC, UK, Jan 2018 - Jun 2019.

◇ Externally-funded research grants in Hong Kong (Total: HKD 2,010,203)

▷ PI, "Relaxation Methods in Principal and Discriminative Component Analysis for Tensor Data", HKD 482,605, 2016/17 General Research Fund (GRF), RGC (Ref: HKBU12248616).

▷ PI, "Learning Independent Components with Tensor-based Modelling for Big fMRI Data", HKD 695,861, 2015/16 General Research Fund (GRF), RGC (Ref: HKBU12200915).

▷ PI, "Dimensionality Reduction for Learning Correlations between Big Multidimensional Data", HKD 831,737, 2014/15 Early Career Scheme (ECS), RGC (Ref: HKBU22200014).

CITATION
STATISTICS

◇ Citation profile: `http://scholar.google.com/citations?user=CArrsDMAAAAJ`.

◇ h-index: 25; total citations: 3,576; average citations per paper: 46.0; as of January 29, 2022.

PUBLICATIONS

◇ **Book**

[B1] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Multilinear Subspace Learning: Dimensionality Reduction of Multidimensional Data", Chapman & Hall/CRC Press Machine Learning and Pattern Recognition Series, Taylor and Francis, ISBN: 978-1-4398572-4-3, 2013.

◇ **Refereed Journal Papers** [# indicates a supervised student]

[J22] Y. Ge#, P. Peng, and **H. Lu**, "Mixed-Order Spectral Clustering for Networks", *Pattern Recognition*, 117, 107964, 2021.

[J21] K. Dwivedii#, M. Sharkey, J. Uthoff#, S. Alabed#, P. Metherall, **H. Lu**, R. Condliffe, J. Wild, E. Hoffman, A. J. Swift, D. Kiely, "Pulmonary Hypertension in Association with Lung Disease: Quantitative CT and Artificial Intelligence to the Rescue? State-of-the-Art Review", *Diagnostics*, 11(4), 679, 2021.

[J20] M. Schirmer, A. Venkataraman, I. Rekik, M. Kim, S. Mostofsky, M. Nebel, K. Rosch, K. Seymour, D. Crocetti, H. Irzan, M. Hütel, S. Ourselin, N. Marlow, A. Melbourne, E. Levchenko, S. Zhou#, M. Kunda#, **H. Lu**, N. C Dvornek, J. Zhuang, G. Pinto, S. Samal, J. Bernal-Rusiel, R. Pienaar, A. W. Chung, "Neuropsychiatric Disease Classification Using Functional Connectomics–Results of the Connectomics in NeuroImaging Transfer Learning Challenge", *Medical Image Analysis*, 70, 101972, 2021.

[J19] A. J Swift*, **H. Lu***, J. Uthoff#, P. Garg, M. Cogliano, J. Taylor, P. Metherall, S. Zhou#, C. S Johns, S. Alabed#, R. Condliffe, A. Lawrie, J. Wild and D. Kiely, "A Machine-Learning CMR Approach to Extract Disease Features and Automate Pulmonary Arterial Hypertension Diagnosis", *European Heart Journal - Cardiovascular Imaging*, 22(2), 236–245, 2021. *joint first author

[J18] Y. Zhou#, **H. Lu**, and Y.-M. Cheung, "Probabilistic Rank-One Tensor Analysis with Concurrent Regularizations", *IEEE Trans. on Cybernetics*, 51(7), 3496-3509, 2021.

[J17] P. Bai#, Y. Ge#, F. Liu#, and **H. Lu**, "Joint Interaction with Context Operation for Collaborative Filtering", *Pattern Recognition*, 88, 729-738, 2019.

[J16] Q. Shi#, Y. M. Cheung, Q. Zhao, and **H. Lu** "Feature Extraction for Incomplete Data via Low-rank Tensor Decomposition with Feature Regularization", *IEEE Trans. on Neural Networks and Learning Systems*, 30(6), 1803-1817, 2019.

[J15] Q. Shi#, **H. Lu** and Y. M. Cheung, "Rank-One Matrix Completion with Automatic Rank Estimation via L1-Norm Regularization", *IEEE Trans. on Neural Networks and Learning Systems*, 29(10), 4744-4757, 2018.

[J14] X. Xie, Z.-L. Yu, **H. Lu**, Z. Gu and Y. Li, "Motor Imagery Classification based on Bilinear Sub-Manifold Learning of Symmetric Positive-Definite Matrices", *IEEE Trans. on Neural Systems & Rehabilitation Engineering*, 25(6), 504-516, 2017.

[J13] **H. Lu**, Y. Pan, B. Mandal, H.-L. Eng, C. Guan and D. W. S. Chan, "Quantifying Limb Movements in Epileptic Seizures through Color-based Video Analysis", *IEEE Trans. on Biomedical Engineering*, 60(2), 461-469, 2013.

[J12] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "A Survey of Multilinear Subspace Learning for Tensor Data", *Pattern Recognition*, 44(7), 1540-1551, 2011.

[J11] **H. Lu**, H.-L. Eng, C. Guan, K. N. Plataniotis and A. N. Venetsanopoulos, "Regularized Common Spatial Pattern With Aggregation for EEG Classification in Small-Sample Setting", *IEEE Trans. on Biomedical Engineering*, 57(12), 2936-2946, 2010.

[J10] F. Bui, K. Martin, **H. Lu**, K. N. Plataniotis and D. Hatzinakos, "Fuzzy Key Binding Strategies Based on Quantization Index Modulation (QIM) for Biometric Encryption (BE) Applications", *IEEE Trans. on Information Forensics and Security*, 5(1), 118-132, 2010.

[J9] K. Martin, **H. Lu**, F. Bui, K. N. Plataniotis and D. Hatzinakos, "A Biometric Encryption System for the Self-Exclusion Scenario of Face Recognition", *IEEE Systems Journal*, 3(4), 440-450, 2009.

[J8] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Uncorrelated Multilinear Principal Component Analysis for Unsupervised Multilinear Subspace Learning", *IEEE Trans. on Neural Networks*, 20(11), 1820-1836, 2009.

[J7] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Boosting Discriminant Learners for Gait Recognition using MPCA Features", *EURASIP Journal on Image and Video Processing*, 2009, 713183, 2009.

[J6] J. Wang, **H. Lu**, K. N. Plataniotis and J. Lu, "Gaussian Kernel Optimization for Pattern Classification", *Pattern Recognition*, 42(7), 1237-1247, 2009.

[J5] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Uncorrelated Multilinear Discriminant Analysis with Regularization and Aggregation for Tensor Object Recognition", *IEEE Trans. on Neural Networks*, 20(1), 103-123, 2009.

[J4] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "MPCA: Multilinear Principal Component Analysis of Tensor Objects", *IEEE Trans. on Neural Networks*, (19), (1), 18-39, Jan. 2008.

[J3] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "A Full-Body Layered Deformable Model for Automatic Model-Based Gait Recognition", *EURASIP Journal on Advances in Signal Processing*, 2008, 261317, 2008.

[J2] **H. Lu**, Y. Q. Shi, A. C. Kot and L. Chen, "Binary Image Watermarking through Blurring and Biased Binarization", *International Journal of Image and Graphics*, 5(1), 67-87, 2005.

[J1] **H. Lu**, A. C. Kot and Y. Q. Shi, "Distance-Reciprocal Distortion Measure for Binary Document Images", *IEEE Signal Processing Letters*, 11(2), 228-231, 2004.

◇ **Refereed Conference Papers** [# indicates a supervised student/staff]

[C34] L. Zhang#, L. Shi, J. Zhao, J. Yang, T. Lyu, D. Yin, and **H. Lu**, "A GNN-based Multi-task Learning Framework for Personalized Video Search", in Proceedings of the Fifteenth International Conference on Web Search and Data Mining (WSDM 2022), February 21-25, 2022.

[C33] P. Bai#, F. Miljkovi, Y. Ge#, N. Greene, B. John, and **H. Lu**, "Hierarchical Clustering Split for Low-Bias Evaluation of Drug-Target Interaction Prediction", in *Proceedings of the IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2021)*, December 9-12, 2021.

[C32] L. Schobs#, S. Zhou#, M. Cogliano, A. Swift, and **H. Lu**, "Confidence-quantifying landmark localisation for cardiac MRI", in *Proceedings of the IEEE International Symposium on Biomedical Imaging (ISBI 2021)*, April 13-16, 2021.

[C31] L. Zhang#, and **H. Lu**, "A Feature-Importance-Aware and Robust Aggregator for GCN", in *Proceedings of the 29th ACM Conference on Information and Knowledge Management (CIKM 2020)*, Galway, Ireland, Pages. 1813-1822, October 19-23, 2020.

[C30] J. Uthoff#, S. Alabed#, A. Swift, and **H. Lu**, "Geodesically Smoothed Tensor Features for Pulmonary Hypertension Prognosis using the Heart and Surrounding Tissues", in *Proceedings of the 23rd International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2020)*, Lima, Peru, pages. 253-262, October 04-08, 2020.

[C29] S. Zhou#, W. Li#, C. Cox, and **H. Lu**, "Side Information Dependence as a Regularizer for Analyzing Human Brain Conditions across Cognitive Experiments", in *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI 2020)*, New York, New York, USA. Pages. 6957-6964, February 07-12, 2020.

[C28] Q. Shi#, **H. Lu** and Y. M. Cheung, "Tensor Rank Estimation and Completion via CP-based Nuclear Norm", in *Proceedings of the 26th ACM Conf. on Information and Knowledge Management (CIKM 2017)*, Singapore, Pages 949-958, November 06-10, 2017.

[C27] Y. Zhou#, **H. Lu** and Y. M. Cheung, "Bilinear Probabilistic Canonical Correlation Analysis via Hybrid Concatenations", in *Proceedings of the 31st AAAI Conf. on Artificial Intelligence (AAAI 2017)*, San Francisco, U.S., Pages 2949-2955, February 04-09, 2017.

[C26] X. Song# and **H. Lu**, "Multilinear Regression for Embedded Feature Selection with Application to fMRI Analysis", in *Proceedings of the 31st AAAI Conf. on Artificial Intelligence (AAAI 2017)*, San Francisco, U.S., Pages 2562-2568, February 04-09, 2017.

[C25] L. Song# and **H. Lu**, "Proper Inner Product with Mean Displacement for Gaussian Noise Invariant ICA", in *Proceedings of the 8th Asian Conf. on Machine Learning, Hamilton (ACML 2016)*, Hamilton, New Zealand, Pages 398-413, November 16-18, 2016.

[C24] L. Song# and **H. Lu**, "EcoICA: Skewness-based ICA via Eigenvectors of Cumulant Operator", in *Proceedings of the 8th Asian Conf. on Machine Learning, Hamilton (ACML 2016)*, Hamilton, New Zealand, Pages 445-460, November 16-18, 2016.

[C23] Y. Zhou# and **H. Lu**, "Probabilistic Rank-One Matrix Analysis with Concurrent Regularization", in *Proceedings of the 25th International Joint Conf. on Artificial Intelligence (IJCAI 2016)*, New York City, U.S., Pages 2428-2434, July 09-15, 2016.

[C22] **H. Lu**, J. Wu, and Y. Zhang "Learning Compact Binary Codes from Higher-Order Tensors via Free-Form Reshaping and Binarized Multilinear PCA", in *Proceedings of the 2016 International Joint Conf. on Neural Networks (IJCNN 2016)*, Vancouver, Canada, Pages 3008-3015, July 24-29, 2016.

[C21] X. Song#, L. Meng#, Q. Shi# and **H. Lu**, "Learning Tensor-Based Features for Whole-Brain fMRI Classification", in *Proceedings of the 18th Int. Conf. on Medical Image Computing and Computer Assisted Intervention (MICCAI 2015)*, Munich, Germany, Pages 613-620, October 05-09, 2015.

[C20] Q. Shi# and **H. Lu**, "Semi-Orthogonal Multilinear PCA with Relaxed Start", in *Proceedings of the 24th International Joint Conf. on Artificial Intelligence (IJCAI 2015)*, Buenos Aires, Argentina, Pages 3805-3811, July 25-31, 2015.

[C19] **H. Lu**, "Learning Modewise Independent Components from Tensor Data Using Multilinear Mixing Model", in *Proceedings of the European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD2013)*, Prague, Czech Republic, Pages 288-303, September 23-27, 2013.

[C18] **H. Lu**, "Learning Canonical Correlations of Paired Tensor Sets via Tensor-to-Vector Projection", in *Proceedings of the 23rd International Joint Conf. on Artificial Intelligence (IJCAI 2013)*, Beijing, China, Pages 1516-1522, August 3-9, 2013.

[C17] B. Mandal, H.-L. Eng, **H. Lu**, D. W. S. Chan and Y.-L. Ng, "Non-intrusive Head Movement Analysis of Videotaped Seizures of Epileptic Origin", in *Proceedings of the 34th Annual Int. Conf. of the IEEE Engineering in Medicine and Biology Society (EMBC'12)*, San Diego, California, Pages 6060-6063, 28th Aug.-1st Sep., 2012.

[C16] **H. Lu**, H.-L. Eng, B. Mandal, D. W. S. Chan and Y.-L. Ng, "Markerless Video Analysis for Movement Quantification in Pediatric Epilepsy Monitoring", in *Proceedings of the 33rst Annual Int. Conf. of the IEEE Engineering in Medicine and Biology Society (EMBC'11)*, Boston, Massachusetts, USA, Pages 8275-8278, 30th Aug.-3rd Sep., 2011.

[C15] **H. Lu**, H.-L. Eng, M. Thida, and K.N. Plataniotis, "Visualization and Clustering of Crowd Video Content in MPCA Subspace", in *Proceedings of the 19st ACM Conf. on Information and Knowledge Management (CIKM 2010)*, Toronto, ON, Canada, Pages 1777-1780, Oct., 2010.

[C14] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Regularized Common Spatial Patterns with Generic Learning for EEG Signal Classification", in *Proceedings of the 31st Annual Int. Conf. of the IEEE Engineering in Medicine and Biology Society (EMBC'09)*, Minneapolis, Minnesota, USA, Pages 6599-6602, Sep. 2009.

[C13] **H. Lu**, K. Martin, F. Bui, K. N. Plataniotis and D. Hatzinakos, "Face recognition with biometric encryption for privacy-enhancing self-exclusion", in *Proceedings of the 16th Int. Conf. on Digital Signal Processing (DSP 2009)*, Santorini, Greece, Jul. 2009.

[C12] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Uncorrelated Multilinear Principal Component Analysis through Successive Variance Maximization", in *Proceedings of the 25th Int. Conf. on Machine Learning (ICML 2008)*, Helsinki, Finland, Pages 616-623, Jul. 2008.

[C11] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Boosting LDA with Regularization on MPCA Features for Gait Recognition", in *Proceedings of the Biometrics Symposium 2007 (BSYM 2007)*, Baltimore, USA, Sep. 2007. doi:10.1109/BCC.2007.4430542.

[C10] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Uncorrelated Multilinear Discriminant Analysis with Regularization for Gait Recognition", in *Proceedings of the Biometrics Symposium 2007 (BSYM 2007)*, Baltimore, USA, Sep. 2007.

[C9] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Gait Recognition through MPCA plus LDA", in *Proceedings of the Biometrics Symposium 2006 (BSYM 2006)*, Baltimore, USA, Sep. 2006.

[C8] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Multilinear Principal Component Analysis of Tensor Objects for Recognition", in *Proceedings of the Int. Conf. on Pattern Recognition (ICPR 2006)*, Hong Kong, China, Vol. 2, Pages 776-779, Aug. 2006.

[C7] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "Coarse-to-Fine Pedestrian Localization and Silhouette Extraction for the Gait Challenge Data Sets", in *Proceedings of the IEEE Int. Conf. on Multimedia & Expo (ICME 2006)*, Toronto, Canada, Pages 1009-1012, Jul. 2006.

[C6] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "A Layered Deformable Model for Gait Analysis", in *Proceedings of the IEEE Int. Conf. on Automatic Face and Gesture Recognition (FG 2006)*, Southampton, UK, Pages 249-254, Apr. 2006.

[C5] **H. Lu**, A. C. Kot and R. Susanto, "Binary Image Watermarking through Biased Binarization", in *Proceedings of the 2003 IEEE Int. Conf. on Multimedia & Expo (ICME 2003)*, Baltimore, Maryland, USA, Vol. 3, Pages 101-104, Jul. 2003.

[C4] **H. Lu**, A. C. Kot and J. Cheng, "Secure Data Hiding in Binary Document Images for Authentication", in *Proceedings of the 2003 IEEE International Symposium on Circuits and Systems (ISCAS 2003)*, Bangkok, Thailand, Vol. 3, Pages 806-809, May 2003.

[C3] **H. Lu**, X. Shi, Y. Q. Shi, A. C. Kot and L. Chen, "Watermark Embedding in DC Components of DCT for Binary Images", in *Proceedings of the IEEE International Workshop on Multimedia Signal Processing (MMSP 2002)*, US Virgin Islands, Pages 300-303, Dec. 2002.

[C2] **H. Lu**, X. Jiang and W. Y. Yau, "Effective and Efficient Fingerprint Image Postprocessing", in *Proceedings of the Seventh Int. Conf. on Control, Automation, Robotics and Vision (ICARCV 2002)*, Singapore, Pages 985-989, Dec. 2002.

[C1] **H. Lu**, J. Wang, A. C. Kot and Y. Q. Shi, "An Objective Distortion Measure for Binary Document Images Based on Human Visual Perception", in *Proceedings of the 16th Int. Conf. on Pattern Recognition (ICPR 2002)*, Quebec City, Canada, Vol. 4, Pages 239-242, Aug. 2002.

◇ **Book Chapters**

[BC2] **H. Lu**, K. N. Plataniotis and A. N. Venetsanopoulos, "A Taxonomy of Emerging Multilinear Discriminant Analysis Solutions for Biometric Signal Recognition", in *Biometrics: Theory, Methods, and Applications*, N. Boulgouris, K. N. Plataniotis, and E. Micheli-Tzanakou, Eds., Pages 21-45, Wiley-IEEE Press, ISBN: 978-0-470-24782-2, 2009.

[BC1] **H. Lu**, J. Wang and K. N. Plataniotis, "A Review on Face and Gait Recognition: System, Data and Algorithms", in *Advanced Signal Processing: Theory and Implementation for Sonar, Radar, and Non-Invasive Medical Diagnostic Systems, Second Edition*, S. Stergiopoulos, Editor, Pages 303-330, CRC Press, Boca Raton, Florida, ISBN: 978-1-4200-6238-0, 2009.

◇ **Patent**

[P2] **H. Lu** and A. Swift, "Tensor based feature learning analysis approach to interrogate medical images", International (PCT) Patent Application No PCT/GB2019/053014, filed, Oct. 2019.

[P1] A. C. Kot, H. Yang and **H. Lu**, "Method, Software and Device for Hiding Data in Binary Images While Preserving Image Quality", United States Patent 7,324,662, January 29, 2008.

STUDENT AND STAFF SUPERVISION

◇ Principal supervisor of post-doctoral researchers, the University of Sheffield.

▷ Johanna Uthoff, October 2019 – September 2021.

▷ Wenwen Li, June 2018 – August 2019.

◇ Principal supervisor of visiting researchers, the University of Sheffield.

▷ Xianyuan Liu, September 2019 – September 2021.

◇ Principal supervisor of PhD students, the University of Sheffield.

▷ Sina Tabakhi, from November 2021

▷ Pawel Pukowski, from November 2021

▷ Peizhen Bai, from January 2021

▷ Lawrence Schobs, from September 2019

▷ Shuo Zhou, from February 2018, to start as an Academic Fellow in Feb 2022 at University of Sheffield

▷ Li Zhang, from September 2017, thesis submitted in September 2021

▷ Yan Ge, ""Representation Learning with Motif Structures", completed in August 2021, now a Lecturer at University of Bristol

◇ Co-supervisor of PhD students, the University of Sheffield.

▷ Haoran Yi, from October 2021

▷ Ludmila Kucikova, from October 2021

▷ Krit Dwivedi , from October 2020.

▷ Samer Al-Abed , from October 2019.

◇ Principal supervisor of two PhD students, Hong Kong Baptist University (HKBU).

▷ Yang Zhou, completed in 2019.

▷ Qiquan Shi, completed in 2018.

◇ Supervisor of two research assistants, HKBU.

▷ Liyan Song, from November 2015 to July 2016.

▷ Xiaonan Song, from January 2015 to August 2015.

RELEASED
SOFTWARE

50,000+ downloads in total:

[S4] Machine learning library: `https://github.com/pykale/pykale`, part of the PyTorch ecosystem

[S3] GitHub: `https://github.com/haipinglu`

[S2] MATLAB Central: `http://www.mathworks.com/matlabcentral/fileexchange/authors/80417`

[S1] Machine Learning Open Source Software: `http://mloss.org/software/author/haiping-lu/`

SELECTED TALKS

[T5] Insigneo Showcase (>200 delegates), "Interpretable Machine Learning", Sheffield, May 2019.

[T4] Oxford BDI Seminar, "Interpretable Machine Learning with Tensor Models for Healthcare", the Big Data Institute (BDI), University of Oxford, April 2019.

[T3] "Tensor Analysis and Learning for Medical Data", ECE Seminar, Brunel University, UK, May 2018.

[T2] "Tensor Analysis and Learning", Artificial Intelligence and Natural Computation Seminars, University of Birmingham, UK, December 2017.

[T1] "The Birth of My First Proposal", experience sharing on proposal preparation, one of the two speakers nominated by the RGC Engineering Panel Chair, *RGC Town Hall Meeting on Submission of Individual Research Proposals*, December 10, 2015.

PROFESSIONAL
SERVICES

◇ Turing Network Development Award Lead at Sheffield, since 2022

◇ Insigneo Research Director for Healthcare Data / AI, University of Sheffield, since 2021

◇ Machine Learning Theme Lead for Sheffield in the N8 Centre of Excellence in Computationally Intensive Research, University of Sheffield, since 2021

◇ AI Strategy Lead, Department of Computer Science, University of Sheffield, since 2021

◇ Associate Editor:

▷ IEEE Transactions on Neural Networks and Learning Systems (TNNLS)

▷ IEEE Transactions on Cognitive and Developmental Systems (TCDS)

▷ World Scientific Annual Review of Artificial Intelligence

◇ Area Chair:

▷ International Joint Conf. on Artificial Intelligence (IJCAI): 2021

◇ Senior Program Committee Member:

▷ AAAI Conf. on Artificial Intelligence (AAAI): 2019, 2020, 2022

▷ International Joint Conf. on Artificial Intelligence (IJCAI): 2018, 2019, 2022

◇ Session Chair:

▷ AAAI Conf. on Artificial Intelligence (AAAI): 2017

◇ Program Committee Member: ICML, NeurIPS, AAAI, IJCAI, AISTATS

◇ Organising Committee Member, Semantic Web Challenge: Mining HTML-embedded Product Data at International Semantic Web Conference 2020.

◇ Member of the IEEE Computational Intelligence Society Subcommittee for Outstanding PhD Dissertation Award, 2014, 2015.

◇ Grant proposal reviewer

▷ Natural Sciences and Engineering Research Council, Canda, 2019 and 2021

▷ National Institute for Health Research (NIHR), UK, 2021.

▷ The Biotechnology and Biological Sciences Research Council (BBSRC), UK, 2018 and 2021.

▷ The Engineering and Physical Sciences Research Council (EPSRC), UK, 2018.

▷ The Medical Research Council (MRC), UK, 2018.

▷ Wellcome Trust, UK, 2019

▷ French National Research Agency, 2020

▷ Irish Research Council, 2017.

▷ Romanian National Council for Scientific Research, 2012.

◇ Book Reviewer: Cambridge University Press, 2018, 2020, 2021

PROFESSIONAL MEMBERSHIPS

◇ Senior Member, the Institute of Electrical and Electronic Engineers (IEEE).

▷ IEEE Computational Intelligence Society.

▷ IEEE Signal Processing Society.

TEACHING

◇ Instructor, Department of Computer Science, the University of Sheffield.

▷ COM4509/COM6509 - Machine Learning and Adaptive Intelligence, since Fall 2018.

▷ COM6012 - Scalable Machine Learning: Spring 2017, since Spring 2018.

◇ Instructor, Department of Computer Science, Hong Kong Baptist University.

▷ COMP1320/2006 - Computer Organization: Fall 2014, Fall 2015.

▷ COMP2230/3005 - Design and Analysis of Algorithms: Spring 2014, Fall 2014.

▷ COMP3090/4075 - Introduction to Web Intelligence/Social Computing and Web Intelligence: Fall 2013, Fall 2014, Fall 2015.

▷ COMP3110/4027/7650 - Data Mining and Knowledge Discovery: Spring 2015.

▷ COMP7630 - Web Intelligence and Its Applications: Fall 2013, Fall 2014, Fall 2015.

Date of the latest update: January 29, 2022