Dr. Ling Huang

Curriculum Vitae

ORCID: 0000-0003-1562-1371
Email: l.huang@lms.mrc.ac.uk/lhuang@ic.ac.uk
Website: linghuang.co.uk
Research Group: oreganlab.org

Hammersmith Hospital Campus, London, W120HS, UK
Institute of Clinical Science
Department of Medicine
Imperial College London

Professional Appointments

2025–on **Postdoctoral Research Associate**, Imperial College London, UK

2023–2025 **Postdoctoral Research Fellow**, National University of Singapore, Singapore

2023–2025 **Postdoctoral Research Fellow**, National University Hospital, Singapore

Education

2019–2023 **PhD in Computer science**, University of Technology of Compiègne, France.

2016–2019 **MSc in Computer science**, Zhejiang University of Technology, China.

2012–2016 **BSc in Geophysics**, Anhui University of Technology, China.

Community Service

2026–on **Editoral Board Member**, Information Fusion, sciencedirect.com/journal/information-fusion

2023–on **Reviewer:** Trans.MI, Trans.IP, IF, Artificial Intelligence Review, EAAI, IJAR, KBS, ICML, MICCAI, etc.

Teaching & Supervision

2023–2024 **Co-Lecturer:** NUS-SPH5104, Analytics for Better Health, Semester 2, NUS

2023–2024 **Co-Lecturer:** NUS-SPH6004, Advanced Statistical Learning, Semester 2, NUS

2023–on **PhD supervision:** Cancer Survival Analysis with Heterogeneous Medical Data, NUS

2023–2026 **PhD supervision:** Toward Reliable AI-driven Clinical Decision Support Systems, NUS

2023–2025 **PhD supervision:** Evidential Adversarial Defensive Analysis, Shanghai University

2025–on **Undergraduate Thesis:** Reliability Assessment and Parameter Estimation of Systems Subject to Degradation and Random Shocks, UESTC

2023–2024 **Undergraduate Thesis:** Ground Truth Reliability Study for Enhanced Healthcare Research, NUS

Grants and Fellowships

2025–on **Revolutionizing Cancer Survival Analysis Through Trustworthy AI and Multimodal Integration**
Huang, L (PI); Wang, Z., Dame Julia Higgins Fund. Award

2020–on **Automating Environmental Health Literature Screening Using Large Language models**
Lee, S (PI); Huang, L (Co-PI); Kang, S., Dame Julia Higgins Fund. Award.

2023–2025 **Intelligent Network Infrastructure for Healthcare, Cisco- Philips eICU (telemedicine)**
Feng, M (PI); Huang, L, et al. A*STAR, CISCO Systems (USA) Pte. Ltd and NUS Award: I21001E0002

2019–2023 **Labex MS2T, Investments for the future**.
Denoeux, T (PI), ; Huang, L, et al., National Agency for Research, France. Award: ANR-11-IDEX-0004-02.

Awards

2024 **Best Thesis Prize**, SFGBM (French Society of Biological and Medical Engineering)

Best Paper Awards, International Journal of Approximate Reasoning, Elsevier

Highly Cited Paper Award, BIBE2024

2021 Frontrunner 5000 -Top Articles from Outstanding S&T Journals of China

2020 Journal of Software High Impact Papers

2019 Excellent graduation thesis of Zhejiang University of Technology; Outstanding Graduates of Zhejiang Province

2017 Chinese National Scholarship (The highest honor for graduate students)

2016 Outstanding Graduates of Anhui University of Technology

Selected Invited Presentations

2025 **Trustworthy AI healthcare with uncertainty quantification and information fusion**.
Nanyang Technological University (Singapore)

Deep evidential fusion for trustworthy multimodal medical image segmentation.
CNRS, Le GdR IASIS

2024 **AI foundation for multimodal dementia analysis**.
Télécom Paris, CREATIS Lab (INSA Lyon), ICube Lab (Strasbourg University), LaBRI Lab (Bordeaux University)

2023 **Trust deep learning model in healthcare: From accuracy to reliability**.
3rd Big Data Machine Learning in Healthcare & Olympus ATR

2019 **Medical image segmentation with belief function theory and deep learning**.
Harvard Medical School, Oxford University, EPFL

Publication Highlights (See Full list for more Publications)

2025 **EsurvFusion: An evidential multimodal survival fusion model based on Epistemic random fuzzy sets**.
Huang, L; *et al*. IEEE Transactions on Fuzzy Systems. doi:10.1109/TFUZZ.2025.3623879

2025 **Evidential time-to-event prediction with calibrated uncertainty quantification**.
Huang, L; *et al*. International Journal of Approximate Reasoning. doi:10.1016/j.ijar.2025.109403

2025 **Towards accurate and reliable ICU outcome prediction: a multimodal learning framework based on belief function theory using structured EHRs and free-text notes**.
Ruan,Y; Huang, L* (Corresponding); *et al*. Journal of Healthcare Informatics Research. doi:10.1007/s41666-025-00219-3

2025 **DPsurv: Dual-Prototype Evidential Fusion for Uncertainty-Aware and Interpretable Whole-Slide Image Survival Prediction**.
Xing, Y; Huang, L* (Corresponding); *et al*. Arxiv. doi:10.48550/arXiv.2510.00053

2024 **Deep evidential fusion with uncertainty quantification and reliability learning for multimodal medical image segmentation**.
Huang, L; *et al*. Information Fusion. doi:10.1016/j.inffus.2024.102648

2024 **Has multimodal learning delivered universal intelligence in healthcare? A comprehensive survey**.
Lin, Q; Zhu, Y; Mei, X; Huang, L* (Corresponding); *et al*. Information Fusion. doi:10.1016/j.inffus.2024.102795

2024 **A review of uncertainty quantification in medical image analysis: probabilistic and non-probabilistic methods**.
Huang, L; *et al*. Medical Image Analysis. doi:10.1016/j.media.2024.103223

2024 **An evidential time-to-event prediction model based on Gaussian random fuzzy numbers**.
Huang, L; *et al*. BELIEF 2024 (**Best paper award**). doi:10.1007/978-3-031-67977-3$_6$

2023 **Application of belief functions to medical image segmentation: A review**.
Huang, L; *et al*. Information fusion. doi:10.1016/j.inffus.2022.11.008

2023 **Semi-supervised multiple evidence fusion for brain tumor segmentation**.
Huang, L; *et al*. Neurocomputing. doi:10.1016/j.neucom.2023.02.047

2022 **Lymphoma segmentation from 3D PET-CT images using a deep evidential network**.
Huang, L; *et al*. International Journal of Approximate Reasoning. doi:10.1016/j.ijar.2022.06.007

2022 **Evidence fusion with contextual discounting for multi-modality medical image segmentation**.
Huang, L; *et al*. MICCAI2022. doi:10.1007/978-3-031-16443-9$_39$

2021 **Belief function-based semi-supervised learning for brain tumor segmentation**.
Huang, L; *et al*. ISBI2021. doi:10.1109/ISBI48211.2021.9433885

2018 **Optimization of deep convolutional neural network for large scale image retrieval**.
Bai, C., Huang, L; *et al*. Neurocomputing. doi:10.1016/j.neucom.2018.04.034