Jiancheng (JC) Yang

Date of CV: 07/2026

AI for Health | PI @ ELLIS Institute Finland | Assistant Professor @ Aalto | Forbes 30 Under 30

jiancheng-yang.com | ORCID: 0000-0003-4455-7145 | Google Scholar: EHkDyiUAAAAJ

Bio. Jiancheng (JC) Yang is a Principal Investigator at the ELLIS Institute Finland and Assistant Professor (Tenure-Track) at Aalto University, where he leads the Health Intelligence Lab. He received his Bachelor's and PhD degrees from Shanghai Jiao Tong University, was a visiting fellow at Harvard, and completed postdoctoral training at EPFL. His research advances AI for health, with a focus on spatial intelligence, generative AI, and multimodal deep learning. JC has authored over 60 publications and is recognized for developing MedMNIST. He serves as Area Chair for MICCAI/NeurIPS/MIDL and is an Editorial Board Member of *npj Digital Medicine*. He was the co-founder and CTO of a medical AI startup, with NMPA-approved (China's FDA) products and multi-million-dollar venture funding. He is a Forbes 30 Under 30 honoree and a recipient of the WAIC Yunfan Award.

Degrees

2024 **Doctor of Philosophy (Ph.D.)** in Information Engineering (Advisor: Bingbing Ni)
Shanghai Jiao Tong University, Shanghai, China
Doctoral dissertation: *"Medical 3D Vision: Algorithms and Applications"*.

2018 **Master of Engineering (M.E.)** in Automation
Shanghai Jiao Tong University, Shanghai, China
Master's thesis: *"Deep Learning-Based Time Series Forecasting"*.

2016 **Engineer's Degree (Dipl.Ing.)** in Information Systems
IMT Mines Albi, Albi, France Double Master's Program

2015 **Bachelor of Engineering (B.E.)** in Automation
Shanghai Jiao Tong University, Shanghai, China

Current employment

2025– **Principal Investigator**
ELLIS Institute Finland, Espoo, Finland

2025– **Assistant Professor (Tenure-Track)** in Intelligent Systems
School of Electrical Engineering, Aalto University, Espoo, Finland

Previous work experience

2021–2025 **Visiting, Research & Postdoctoral Fellow** (Advisor: Pascal Fua)
Swiss Federal Institute of Technology Lausanne (EPFL), Lausanne, Switzerland

2020–2021 **Visiting Fellow** (Advisor: Hanspeter Pfister)
Harvard University, Cambridge, MA, United States

2018–2022 **Co-Founder & CTO**
Dianei Technology (Medical AI Startup), Shanghai, China

Research funding and grants

Note: non-cash resources are reported as approximate monetary equivalents under ERC-style budgeting assumptions.

2026–2030 **PI**, Research Council of Finland Academy Project, €598K, 14.2% funded.
Topic: clinical world models on unaligned multimodal medical data.

2026–2029 **Co-PI**, Business Finland Rise to Challenge, €535K of €4.79M consortium, 3.2% funded. *Topic: Finnish nationwide AI model in healthcare.*

2026 **PI**, Aalto Internal Funding for Cooperation Initiatives with TUM and USA.

2025– **PI**, CSC & LUMI Large Resource Allocations, cumulative ~200K GPU-hours.

2025–2029 **PI**, Starting Funding, ELLIS Institute Finland & Aalto University.

Research output

As of July 2026, I have authored 76 peer-reviewed publications (Google Scholar citations: 6,500+, h-index: 30). My research spans fundamental AI and medical AI methodologies, the development of datasets and challenges, as well as clinical translation research from real-world data.

Selected publications. * indicates equal contribution. † indicates corresponding authorship.

- Tianming Du, ..., Jiazhen Pan, Daniel Rueckert, **Jiancheng Yang**†. "Are LLMs Ready to Assist Physicians? PhysAssistBench for Interactive Doctor-Patient-EHR Assistance." *arXiv*, 2026.
- Kangxian Xie, Yufei Zhu, Kaiming Kuang, Li Zhang, Hongwei Bran Li, Mingchen Gao, **Jiancheng Yang**†. "Template-Guided Reconstruction of Pulmonary Segments with Neural Implicit Functions." *Medical Image Analysis (MedIA)*, 2026.
- Weiyi Zhang, **Jiancheng Yang**, Ruoyu Chen, Siyu Huang, Pusheng Xu, Xiaolan Chen, Shanfu Lu, Hongyu Cao, Mingguang He, Danli Shi. "Fundus to Fluorescein Angiography Video Generation as a Retinal Generative Foundation Model." *npj Digital Medicine (Nature Portfolio)*, 2026.
- Yinghong Yu*, Guangyuan Li*, **Jiancheng Yang**†. "PlaneCycle: Training-Free 2D-to-3D Lifting of Foundation Models Without Adapters." *Medical Image Computing and Computer Assisted Intervention (MICCAI)*, 2026.
- **Jiancheng Yang***, Rui Shi*, Liang Jin, Xiaoyang Huang, Kaiming Kuang, ..., Hanspeter Pfister, Ming Li, Bingbing Ni. "Deep Rib Fracture Instance Segmentation and Classification from CT on the RibFrac Challenge." *IEEE Transactions on Medical Imaging (TMI)*, 2025.
- Hantao Zhang, Yuhe Liu, **Jiancheng Yang**†, Shouhong Wan, Xinyuan Wang, Wei Peng, Pascal Fua. "LeFusion: Controllable Pathology Synthesis via Lesion-Focused Diffusion Models." *International Conference on Learning Representations (ICLR)*, 2025. Spotlight.
- Hantao Zhang, Yuhe Liu, **Jiancheng Yang**†, Weidong Guo, Xinyuan Wang, Pascal Fua. "DiffAtlas: GenAI-fying Atlas Segmentation via Image-Mask Diffusion." *Medical Image Computing and Computer Assisted Intervention (MICCAI)*, 2025. Spotlight.
- **Jiancheng Yang**†. "Multi-task learning for medical foundation models." *Nature Computational Science*, 2024. News & Views.
- **Jiancheng Yang**, Rui Shi, Donglai Wei, Zequan Liu, Lin Zhao, Bilian Ke, Hanspeter Pfister, Bingbing Ni. "MedMNIST v2 – A large-scale lightweight benchmark for 2D and 3D biomedical image classification." *Scientific Data*, 2023. *ESI Highly Cited Paper & Hot Paper*.
- **Jiancheng Yang**†, Hongwei Bran Li, Donglai Wei. "The Impact of ChatGPT and LLMs on Medical Imaging Stakeholders: Perspectives and Use Cases." *Meta-Radiology*, 2023.
- **Jiancheng Yang**, Udaranga Wickramasinghe, Bingbing Ni, Pascal Fua. "ImplicitAtlas: Learning Deformable Shape Templates in Medical Imaging." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022.

Research supervision and leadership experience

2025– PI, Health Intelligence Lab, ELLIS Institute Finland & Aalto University
The group currently comprises 1 postdoc, 4 PhD students, 3 co-supervised or collaborating PhD students (2 pre-Aalto, 1 with U. Helsinki), 3 master's students, and is actively recruiting more.

2018–2025 Before my PI role, I regularly mentored 20+ students from diverse backgrounds, both in person and remotely; their work led to top-tier publications, and several have been admitted to top PhD programs including Harvard, MIT, ETH Zurich,

	and EPFL, with many remaining active collaborators.
2018–2022	Co-Founder & CTO, Dianei Technology (Medical AI Startup), Shanghai, China

Teaching merits

Instructor for AI in Health Technologies D from Fall 2026 onward; Guest Instructor in Fall 2025.

Invited guest lectures at international universities in USA and China; pedagogical studies: 5 ECTS.

Coordinator of the ELLIS Distinguished Lectures (2026–); Organizer of the ELLIS Summer School: AI for Research (2026) and the MICCAI MedShapeNet Tutorial (2024, 2025).

Awards and honours

2024–2025	Stanford/Elsevier's Top 2% Scientists
2023	Forbes 30 Under 30 Asia (Healthcare & Science)
2022	Yunfan Award Rising Stars, World Artificial Intelligence Conference (WAIC)
2022	Person of the Year Nomination Award, Shanghai Jiao Tong University
2019–2021	National PhD Scholarship (Top 2%), China (3 times)
2010	First Prize, National High School Mathematics Competition

Other key academic merits

2026	Area Chair, Advances in Neural Information Processing Systems (NeurIPS)
2026	Session Chair, IEEE International Symposium on Biomedical Imaging (ISBI)
2024, 2025, 2026	Area Chair, Med. Image Comput. Comput. Assist. Interv. (MICCAI)
2025, 2026	Area Chair, Medical Imaging with Deep Learning (MIDL)
2022	Organizer, MICCAI MELA Challenge
2020	Lead Organizer, MICCAI RibFrac Challenge
2024–	Editorial Board Member, *npj Digital Medicine* (Nature Portfolio)
2020–	Regular reviewer for major AI conferences, including MICCAI, CVPR, ICCV, ECCV, NeurIPS, ICML, and ICLR, and for more than 20 leading journals such as *Nature Computational Science*, *Nature Communications*, *Cell Reports Medicine*, *npj Digital Medicine*, *MedIA*, and *IEEE TPAMI/TMI/TIP/TNNLS/TIFS*.
2019–	Member, ELLIS (2025–), IEEE (2020–), and MICCAI Society (2019–)

Scientific and societal impact

Open science. I am committed to open science. My MedMNIST (500,000+ downloads, 2 papers cited 2,500+ times) is widely used across medical-AI research and teaching. As lead organizer I also hosted the MICCAI 2020 RibFrac Challenge (1,200+ participants worldwide); the related RibSeg dataset now underpins the rib module of TotalSegmentator, a widely used open CT segmentation tool.

Real-world translation. I co-founded and served as CTO of a medical-AI startup for whole-course lung cancer management, from screening to diagnosis and treatment support. Three systems received NMPA (China's FDA) clearance and were deployed in 30+ hospitals; the company raised CNY 50M+ (approx. EUR 6M) in venture funding.

Outreach and public engagement. I have delivered 50+ invited talks across 10+ countries, and initiated and organize the HIT Webinar, a non-profit Chinese-language series on healthcare and AI (100+ sessions since 2022), and mentor for the MICCAI Society Mentorship Program and Fatima Fellowship. I was a featured contributor to Aalto University's "Laboratory of Hope" exhibition (2026).