

Luming Yang

22 YO | The Ohio State University

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Education

Ph.D., The Ohio State University Electrical and Computer Engineering, Advisor Prof. Alper Yilmaz	Aug 2024 – present Columbus, OH, USA
• Main Focus: Interdisciplinary AI, Medical AI, Computer Vision, Bioinformatics	
B.Eng., Southern University of Science and Technology Computer Science and Technology	Sep 2020 – Jun 2024 Shenzhen, China
• Main Course: Medical Artificial Intelligence, Deep Learning, Software Engineering, Operating System, Computer Security, Computer Networks, Data Mining, Discrete Mathematics, Algorithm Design and Analysis	
The Hong Kong Polytechnic University, Program in machine learning	Jan 2024 – May 2024

Experience

Graduate Research Associate , Photogrammetric Computer Vision Lab, OSU	May 2024 – Present
Research Associate , Evolving Machine Intelligence Lab, SUSTech <i>Shenzhen, China</i>	Jun 2021 – Jun 2024
• Designed & implemented EvoX : High-performance evolutionary computation framework using JAX's automatic differentiation and GPU/TPU acceleration. Developed distributed co-evolution algorithms on large-scale neuroevolution tasks. 700+ GitHub stars .	
AI Research Intern , Smart Dynamics, <i>Shenzhen, China</i>	Jun 2023 – Oct 2023
• Training and optimizing real-world physics models using large-scale multimodal vision datasets. Increased threat detection accuracy by 14% (84.3% → 98.1%) while reducing inference latency.	
Teaching Associate , SUSTech, <i>Guangdong, China</i>	Aug 2021 – Jun 2022
• Participate in teaching Data Structure and Algorithm Analysis and other courses, prepare courseware and exams. Teach medical first aid and organize practical assessments.	

Publications

Tensorized Ant Colony Optimization for GPU Acceleration	Oct 2023
Luming Yang, Tao Jiang, Ran Cheng*. Proceedings of the GECCO'24 (CORE-A) 10.1145/3638530.3654394	
Transformer-Based Learning for T-cell Receptor Peptide Binding	Dec 2024
Luming Yang, Haoxian Liu, Sansoterra Nicholas, Alper Yilmaz*. <i>In review at Briefings in Bioinformatics</i>	
Multivariate Gaussian Representation for Medical Action Evaluation	Feb 2025
Luming Yang#, Haoxian Liu#, Siqing Li, Alper Yilmaz*. <i>Preparing for AAAI'26 (ICCV borderline reject)</i>	
Disentangling Global Spread of IA Virus with Bayesian Method	Apr 2025
Luming Yang#, Rongrong Qu#, Siqing Li, et al., Shigui Yang*. <i>In review at Nature Communications</i>	
Quantifying the Impact of the COVID-19 Pandemic on the Burden of NTDs	Jun 2025
Can Chen#, Rongrong Qu#, Luming Yang# et al., Shigui Yang*. <i>Submitted to BMJ Global Health</i>	

Ongoing Projects

Proton Therapy Dose Prediction with CT using Vision Transformer	July 2025
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Use a multi-stage pre-trained transformer architecture for proton dose estimation and combine it with CT scan for localization. Propose critical region segmentation and a unet architecture suitable for proton.

EEG for Motor Imagery and Stereo EEG for Sleep Stage Classification	Feb 2025
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Use pre-trained architecture and two-stream neural network for EEG signal processing. Analyze the characteristics of sEEG signals and train transfer networks.

Awards & Honors

• University Motto Scholarship (Top 1%)	2023
• National Scholarship Nomination (Top 2%)	2023
• Third Prize Scholarship (Top 15%, twice)	2021, 2022
• Outstanding Youth in Guangdong Province (University nominee)	2023
• Silver Medal , International Genetically Engineered Machine Competition (iGEM)	2023
• First Prize , China International Collegiate "Internet+" Competition	2023
• First Prize , National Olympiad in Informatics in Provinces (2 times)	2018
• Outstanding Volunteer of SUSTech	2021, 2023
• Ethic Award of SUSTech	2022
• Excellent Student of SUSTech	2021

Skills & Certifications

• Technical: Python, JAX, PyTorch, TensorFlow, Evolutionary Algorithms, Computer Vision, Distributed Systems
• Languages: English (TOEFL 105, Fluent), Mandarin (Native), Cantonese (Fluent)
• Certifications: AHA HeartSaver®, Red Cross First Aid, China Red Cross Rescue Mentor, Radio Operator License (Level A), National Volleyball Referee (Level 2)
• Achievements: National ARDF Youth Champion (Radio Orienteering), Shenzhen Volleyball Champion