# Dongyang Li

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06,2022 - 02,2023

02, 2023 - Present

Shenzhen, Guangdong, China

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#### Education

Southern University of Science and Technology Master of Engineering, Electronic Science and Technology		2023-09 – Present Shenzhen, Guangdong, China
Zhengzhou University Bachelor of Engineering, Computer Science and Technology	GPA: 3.54/4.00	2019-09 – 2023-06 Zhengzhou, Henan, China

#### Research Experience

#### Generative models for neural data

Southern University of Science and Technology (SUSTech)

- Advisor: Quanving Liu, Professor of SUSTech, PI of NCCLab
- Neural data interpolation based on generative model

### AI for invasive brain-computer interface

Southern University of Science and Technology (SUSTech)

- Advisor: Quanying Liu, Professor of SUSTech, PI of NCCLab
  - Align the human brain with foundation models
  - Brain-computer interface based on multimodal models
- AI-based closed-loop neural regulation system

#### Research Interests

Representation Learning, Multi-modality Learning, Brain-computer Interface, NeuroAI.

### **Publications**

Dongyang Li, Chen Wei, Shiying Li, Jiachen Zou, and Quanying Liu. "Visual Decoding and Reconstruction via EEG Embeddings with Guided Diffusion." *The Thirty-Eighth Annual Conference on Neural Information Processing Systems (NeurIPS 2024)* 

Dongyang Li, Haoyang Qin, Mingyang Wu, Yuang Cao, Chen Wei and Quanying Liu. "RealMind: Advancing Visual Decoding and Language Interaction via EEG Signals." 2025 IEEE International Conference on Multimedia and Expo (ICME 2025)

**Dongyang** Li, Haoyang Qin, Mingyang Wu, Chen Wei and Quanying Liu. "BrainFLORA: Uncovering Brain Concept Representation via Multimodal Neural Embeddings." (*In submission*)

**Dongyang Li**, Kunpeng Xie, Yiwei Kong, Mingyang Wu, Jiahua Tang, Chen Wei and Quanying Liu. "A closed-loop EEG-based visual stimulation framework from controllable generation." (*In submission*.)

Ruichao Zhan, Dongyang Li (Co-first author), Song Wang and Quanying Liu. "D2CAN: Domain-guided contrastive adversarial network for EEG-based cross-subject cognitive workload decoding." *The Fourth International Workshop on Human Brain and Artificial Intelligence (IJCAI 2024)* 

Sitong Chen, Beiqianyi Li, Cuilin He, Dongyang Li (Co-first author), Mingyang Wu, Xindi Wang, Haiyan Wu and Quanying Liu. "ChineseEEG-2: An EEG Dataset for Multimodal Semantic Alignment and Neural Decoding during Reading and Listening" *Scientific Data.* (*In prep.*)

## Awards & Honors

# "Challenge Cup" National Innovation and Entrepreneurship Plan Competition

Provincial Special Award and National Bronze Award

2020.10

## China Robot Competition, Advanced Vision Competition 3D Recognition Project

National First Prize (Captain)

2022.04

# China Robot Competition, Advanced Vision Competition Industrial Measurement Project

National First Prize (Captain)

2022.04

# Professional Service

Conference Reviewing: ICLR, ICML, NeurIPS, KDD, ACL, ACMMM, MICCAI

#### Other Skills

Programming Languages: Proficient in Python, C++, Java

Machine Learning & AI: Experience with PyTorch, Paddle and various ML algorithms

Data Analysis: Skilled in data preprocessing, visualization, and statistical analysis

English: Fluent (CET-6)

Chinese: Native