Yuesheng Huang

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EDUCATION

Guangdong Polytechnic Normal University, Guangzhou, China   Sep. 2021-Expected in Jun. 2025

Bachelor of Engineering in Internet of Things Engineering(ESI TOP 1% globally)

Average Score: 91.8/100（*RANK*:1/112）   **English level:** CET-6

Core Courses: Data Structures and Algorithms, Linux Operating System, Big Data Technology and Applications, Sensor Principles and Applications, Probability theory and mathematical statistics

RESEARCH PROJECTS

Key Project of Guangdong Provincial Science and Technology Innovation Fund

Project: "*Deep Learning-Based Multimodal Fine-Grained Sentiment Analysis*"   2024-2026

Project Leader

- **Project Overview:** Proposed diffusion model-powered data augmentation with hierarchical feature alignment for multimodal e-commerce reviews (text + images), addressing granular sentiment identification.
- **My Contribution:** Spearheaded end-to-end process from replicating baseline to algorithm optimization. Developed diffusion model-based cross-modal data generation approach, integrated contrastive learning for multi-modal semantic alignment. Achieved 97.13% accuracy (4.8% improvement over single-modal baseline) on Amazon Review dataset.

Innovative Entrepreneurship Program Projects for University Students

Project: "*DASAM: Domain-Adaptive SAM for digital Sankey fishponds Vision Systems*"   2024-2025

Second participant

- **Project Overview:** Developed agricultural vision models by adapting Segment Anything Model (SAM), enabling multi-task capabilities including algae recognition and fish behavior tracking while reducing annotation dependencies.
- **My Contribution:** Implemented optimized FastSAM lightweight deployment framework, engineered channel-attention based agricultural feature enhancement module, achieving 92.7% mAP on Caiji Fishpond dataset.

Innovative Entrepreneurship Program Projects for University Students   2024-2025

Project: "*Interpretable Multimodal Contrastive Learning for Neurodegenerative Disease Diagnosis*"

Project Leader

- **Project Overview:** Proposed unified framework integrating medical tabular data and MRI imaging through interpretable contrastive learning, enhancing early-stage Alzheimer's diagnosis.
- **My Contribution:** Re-engineered CVPR-2023's MMCL-Tabular-Imaging framework by replacing MLPs with TabNet modules for structured data processing, introduced LaaF mechanisms to improve minority class recognition, and conducted encoder parameter fine-tuning on the ADNI dataset, boosting overall accuracy by 2.31% over single-modal benchmarks.

Project of Guangdong Provincial Science and Technology Innovation Fund

Project: "HealthGuard AIoT: Non-invasive Real-time Posture Monitoring System"   2023-2025

Core member

- **Project Overview:** Engineered multimodal health monitoring hardware system synthesizing posture recognition and fatigue detection, achieving real-time risk alert deployment in office environments.
- **My Contribution:** Built YOLOv5-powered posture detection algorithm (sustaining ≥30 FPS), created adaptive threshold-boosted KNN classifier module, and orchestrated system integration of multi-channel pressure sensor matrix through embedded co-debugging protocols.

PUBLICATIONS

Huang Y, et al.(2024) An Improved CNN-LSTM-Attention Model with Kepler Optimization Algorithm for Wind Speed Prediction. [code] Engineering Letters:（First author,ESCI,Github 20 stars）

Li J，**Huang Y**, et al.(2024) [Sentiment Analysis Using E-commerce Review Keyword-generated Image with a Hybrid Machine Learning-based Model](). [[code]] Computers, Materials &Continua:(SCI, IF=2.0, First author is tutor)

HONORS AND AWARDS

A total of *19 national* and *14 provincial* competition awards received, with only a selection shown here.

- *National Scholarship*   Dec. 2023
- People's Daily National *100 outstanding National Scholarship* representative   May. 2024
- 2023 *Guangdong Provincial Person* of the Year (TOP 10 in Guangdong)   Dec. 2024
- *Finalist Award* in the American Collegiate Mathematical Modeling Contest(TOP 1%)   May. 2024
- *Outstanding in* International Mathematics Modeling Contest for Higher Education   Aug. 2023
- *First Prize* in 14th MathorCup Mathematical Modeling Challenge   May. 2024
- *First Prize* in China University Student Computer Design Competition Guangdong   Aug. 2023
- *First Prize* in China University Student Mathematical Modeling Contest Guangdong   Nov. 2023
- *First Prize* in China Undergraduate Mathematical Contest on Electrical Engineering   Jul. 2023
- *First Prize in* Cloud Computing & Big Data Track, DL & CK Competition   Dec. 2023
- *Silver Medalist*   Kaggle Lux AI Reinforcement Learning Challenge   Dec. 2021

PRACTICES AND WORK EXPERIENCES

Project: "*IoT-based smart drone-boats integrating water monitoring & automated feeding*"

Research Group Member of Guangdong hundred million project commandos

- **Overview:** Led 2023 tech mission to Zhanjiang, deploying smart drone-boats for farmers.
- **Effectiveness:** 12.5% quarterly income boost, national Top 100 Team recognition.

Project: "*CarbonCloud Platform——AI-driven carbon management solution*"

Core Developer of Eco-Tech Silver Award, Guangdong Challenge Cup

- **Overview:** Developed IPCC-compliant carbon accounting models for government/enterprise adoption.
- **Effectiveness:** 38 government/enterprise partnerships, urban decarbonization planning.

Project: *Founder of Math Modeling Association of GPNU SCS*

- **Overview:** Responsible for organizing, co-organizing and acting as the advisor of student teams.
- **Effectiveness:** Co-organized 4 national mathematical contests in modeling, led the students to the national first prize as advisor, and won the title of Outstanding Advisor.

SKILLS

Bilingual Writing: Awarded National Second Prize (Top 5%) in National College English Writing Competition with academic paper drafting experience.

Modeling & Programming: Proficient in Python/MATLAB mathematical modeling (provincial+ awards in 10+ competitions), experienced with Pytorch frameworks, Hadoop clusters on Linux, and data prediction/optimization models.

Research Tools: Skilled in LaTeX/Origin/Visio for academic layouts and plots, certified EndNote/ WPS/Office specialist, and award-winning scientific PPTs.

Scholarship: Open source all papers corresponding code (GitHub repository peak 20 stars); Reviewer of IJCNN (CCF-C); With strong ability to write declaration documents, I independently wrote the declaration documents of one provincial key project and two national College Student Innovation Projects.

Interests Skills: Singing , Playing basketball/table tennis.