ZIYU WU

◇ (+33) 07 45 45 32 26 ◇ ziyu.wu@polytechnique.edu
◇ Bâtiment 79, Boulevard des Maréchaux 91120 Palaiseau, France
◇ Personal Page: 172698691.github.io/

SUMMARY

Master 2 student of École Polytechnique, majoring in Artificial Intelligence and Advanced Visual Computing. Currently looking for a 5-6 month research internship from April 2025 and PhD position in 2025 Fall. Research Interest in AI, computer vision, graphics, machine learning, deep learning, etc.

EDUCATION BACKGROUND

École Polytechnique, Paris, France *September 2023 - Present*
AI and Advanced Visual Computing | GPA: 3.81/4.0 Master of Science and Technology
• **Paper:** *Lightweight Morphology-Aware Encoding for Motion Learning (Submitted to Eurographics)*

Southern University of Science and Technology, Shenzhen, China September 2019 - August 2023
Intelligence Science and Technology | GPA: 3.66/4.0 *Bachelor of Engineering*
• **Published Paper:** Evolutionary Multi-Objective Deep Reinforcement Learning for Autonomous UAV Navigation in Large-Scale Complex Environments (GECCO 2023)

INTERNSHIP EXPERIENCE

Animaj, Paris, France
Engineer Intern *March 2024 - September 2024*
Develop lightweight models that reduce computational costs and enable faster updates, while also extending these models to handle the temporal dimension for motion modeling. It involves two key steps: Point Cloud 3D Mesh Auto-Encoder and Skeleton-Cylinder Approximation Model.

King Abdullah University of Science and Technology, Jidda, Saudi Arabia
Research Assistant *September 2022 - May 2023*
Cooperate with the optical laboratory and use the generative model to recover the spectrum of the RGB image. The spectral recovery of images containing single and dual wavelengths was successfully performed.

Guangdong Zhuowei Network Co., Ltd., Foshan, China
Mechine Learning Intern *August 2022 - September 2022*
Mainly responsible for the research and development of vehicle-road cooperation of autonomous vehicles realized through V2VNet. Successfully implemented in the CARLA simulated environment and conducted corresponding tests.

PROJECT EXPERIENCE

3D Luggage Detection for Lost Packages in Airport
Cooperate with the company IMDEMIA and Paris Charles de Gaulle Airport, leverage 3D information to reach better recognition for tracking. Combine 2d bounding box and geometric constrains to project 3D volumn box.

Genshin VTuber
Implement a real-time Genshin VTuber base on head pose estimation and facial feature point detection. Demonstrated superior accuracy and stability in face recognition and tracking in real-time performance.

Deep Reinforcement Learning MOEA for Autonomous UAV Navigation
Combining multi-objective evolutionary algorithm and deep reinforcement learning algorithm together, and using evolutionary algorithm to find the optimal hyperparameters that make Unmanned Aerial Vehicle performs well in multi-objective field. The results have been published as a full paper in GECCO 2023.

SKILLS

Technical: Python, C/C++, Java, Linux, Machine Learning, Deep Learning, AI, Computer Vision, Graphics, Multi-objective Algorithms

Language: English (fluent), Chinese (native), Cantonese (native), French (primary)