

Hengyu Meng

(+86) 18586300117 | mshyumeng@mail.scut.edu.cn
South China University of Technology
<https://hengyumeng.github.io>

EDUCATION

South China University of Technology (SCUT) Sep 2020 - Jun 2024
Functional Materials Bachelor School of Materials Science & Engineering Guangzhou
GPA:3.74/4.00 | Enterprise Scholarship(2021) | The Second Prize of School Scholarship (2022) | English Ability: CET6
Courses Taken :
Calculus(I):85(6%) Calculus(II):93 Probability Theory and Mathematical Statistics:90 Quantum mechanics:90
College Physics(I):99 College Physics(II):94 Optical:85 Electromagnetic fields and electromagnetic waves:89
Semiconductor Physics:91,etc.

RESEARCH EXPERIENCE

SCUT Robot Lab - China University Robot Competition RoboMaster Competition Apr 2022 - Present
Consultant (2022-2023) | Chief Developer (2021-2022) Simulator Group

- In-depth development of a simulator for the RoboMaster Competition utilizing Unity,Blender,Substance 3D Painter.
- Co-Management for Vision Group's global path planning project using gazebo.
- **RoboMaster 2022 University Championship (Central Region) - Silver**
- **RoboMaster 2021 University Championship - Open Source Excellence Award**
- **Software Copyright** : A robotics simulation simulator(Under Review)

SimulatorX - Intelligent Simulation Platform for Robotics Apr 2022 - Present
Chief Developer | Technical Artist

- Funded by National College Students' Innovation and Entrepreneurship Training Program.
- Design software architecture based on C# and Unity.
- Create PBR materials for texturing in Unity HDRP & URP rendering pipeline.
- Modeling and expanding uv mapping based on Blender.
- Mapping based on Substance 3D Painter and PhotoShop.

Machine & Deep learning-assisted material design Apr 2022 - Present
Chief Developer

- Funded by National College Students' Innovation and Entrepreneurship Training Program.
- In-depth development of a deep learning system using Pytorch deep learning framework to build, train, save, and evaluate models.
- Pre-processing data using Excel and python (Pandas, Matplotlib, etc.) with subsequent processing and analysis of predicted data.

PROJECT & COMPETITION EXPERIENCE

RoboMaster online simulation league for operators Mar 2022 - Apr 2022
Technical Consultant | Co-Organizer

- Supported by DJI Education.
- We provided technical support to more than 100 universities nationwide during the competition, including server maintenance and software bug repair,etc.

The 8th Internet + Innovation and Entrepreneurship Competition Jul 2022 - Sep 2022
Client Development Engineer | Technical Consultant

- Responsible for software client development.

- Assist in the writing of business plans.

- **Silver Award at School Level**

South China University of Technology "Futura Cup" Software Design Competition

Apr 2022 - Jul 2022

Chief Developer

- Responsible for software architecture design and optimization.
- **First prize at school level**

EXTRACURRICULAR ACTIVITIES

SimulatorX- Online software launch

Aug 2022 - Sep 2022

Organizer | Presenter

- Act as the presenter, coordinate the work of technical staff and publicity staff to ensure the smooth running of the presentation.
- Responsible for writing the launch script and reviewing the launch video.
- Maintain communication with users to keep abreast of their needs and optimize the software.

SCUT Robot Club

Group Leader(2022-2023) Simulator Group

- Successfully hosted a college-wide Robot Competition with other committee members.
- Cultivated a platform for all robot lovers and all students who wanted to get knowledge of computer vision, machine & deep learning, and all essentials for robotics.

South China University of Technology Promotion Design Competition

Individual Contributor

- Independently photographing campus scenes and making them into postcards using software such as Photoshop and Lightroom.
- **Second Prize**

SKILLS LIST

Game Development

- Game Editor : Unity (Proficient) | Unreal (Basic)
- Modelling : Blender (Proficient) | Maya (Basic)
- Art Processing : Substance 3D Painter (Skilled) | PhotoShop (Skilled) | Lightroom (Experienced)

Machine Learning & Inference

- Framework: Pytorch (Proficient) | OpenmmLab (Experienced)
- OS: Linux (Basic)

Coding

- C# (Proficient) | Python (Skilled) | C++(Basic) | Javascript + Html (Basic)