Hengyu Meng

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South China University of Technology
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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 : IELTS Scheduled Date: 24th March 2023

Courses Taken :

Calculus:93 Probability Theory:90 Quantum mechanics:90 Physics:99 Optical:85

Field and Wave Electromagnetics:89   The Physics of Semiconductor:91,etc.

RESEARCH EXPERIENCE

SCUT Robot Lab - China University Robot Competition RoboMaster Competition Oct 2021 - Present

Consultant (2022-2023) | Chief Developer (2021-2022) Game Development Group

- In-depth development of an on-line FPS game utilizing Unity,Blender,Substance 3D Painter.
- Co-Management for Vision Group's robot automatic path-finding project using Gazebo.
- **RoboMaster 2022 University Championship (Central Region) - Silver**
- **RoboMaster 2021 University Championship - Open Source Excellence Award**

SimulatorX - Intelligent Simulation Platform for Robotics Apr 2022 - Present

Chief Developer | Technical Artist

- Funded by National College Students' Innovation and Entrepreneurship Training Program.
- In-depth development of a game where users can customize different kinds of robots and participate in shooting competitions
- 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 learning based material design Apr 2022 - Present

Chief Developer

- Funded by National College Students' Innovation and Entrepreneurship Training Program.
- We use deep learning models instead of traditional methods to discover high performance materials with greater speed and less cost.
- In-depth development of a deep learning system using Pytorch framework

PROJECT & COMPETITION EXPERIENCE

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**

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**

The 9th Photoelectric Design Competition   Aug 2021 - Sep 2021

Chief Developer

- Supported by School of Physics and Optoelectronics at South China University of Technology.
- In-depth development of a robot capable of automatic pathfinding and object recognition
- **Award of Excellence (South East Region)**

EXTRACURRICULAR ACTIVITIES

RoboMaster online competition tactics communication activities   Mar 2022 - Apr 2022

Technical Consultant | Co-Organize

- 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.

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.

SKILLS LIST

Game Development

- Game Editor : Unity (Proficient) | Unreal (Basic)
- Modelling : Blender (Proficient)
- 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++ (Experienced)