

XINYUE LIANG

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EDUCATION

Dartmouth College, Hanover NH

Master of Science in Computer Science and Digital Art | 09/2023 – 06/2025(Expected)

GPA: High Pass/ High pass

TA Experience: COSC 74/274 Machine Learning Course Section Leader

University of Wisconsin-Madison, Madison WI

Bachelor of Science in Computer Science with a minor in Game Design and Digital Media | 09/2019 – 05/2023

GPA: 3.663/4.0 Dean's List: Spring 2020, Fall 2020, Spring 2021

PROJECTS

Car Mechanic Simulation VR Game – Turbo Forge

Unity3D, Maya, C#, Scene Design, XR UI, Light Baking

- Developed an engaging car mechanic simulator that allows players to build a Porsche 930 from scratch.
- Designed and implemented a UI-integrated Game Manager to provide a smooth and efficient control system at a higher level of gameplay.
- Modeled and animated interactive machinery in Maya, enhancing the game's interactivity and realism.
- Designed and baked scene lighting to improve visual aesthetics and overall game realism.

EXPERIENCES

Sinosoft Co. Ltd.

Shenzhen China

SDET Intern | Java, Automated Testing

12/2020 – 01/2021

- Directly engaged with clients to accurately define requirements, resulting in enhanced product specifications and optimized testing workflows derived from meeting discussions.
- Streamlined negotiation processes, reducing meeting duration by 50% and significantly boosting overall efficiency.
- Served as the primary liaison for Emtek, conducting comprehensive testing of the order-based data management system to ensure robust functionality and client satisfaction.

Baidu Inc.

Beijing China

Full Stack SDE Intern | Rive, Android Studio, Elastic Search, MySQL, Python, Java, C#, JS, CSS

06/2021 – 08/2021

- Engineered a multi-threaded backend system that retrieved over 50 million records from Elasticsearch and MySQL, dramatically improving data retrieval efficiency.
- Preprocessed user-requested data to enable the creation of a knowledge graph and improve data visualization capabilities for NLP model data annotation.
- Designed and developed an intuitive user interface for face recognition and animation features, significantly improving functionality and user engagement.

Bonfiglioli

Remote

MLE Intern | Feature Engineering, Logistic Regression, Data Preprocessing, Data Pipeline

11/2023 – 12/2023

- Collected and analyzed industry and consumer data to identify trends and inform business strategies.
- Fine-tuned regression models to enhance predictive accuracy by 15% for future sales forecasting.

Dartmouth College Reality and Robotics Lab

Hanover NH, USA

Research Intern | ViT, U-Net, eo-learn, encoder-decoder, Unity3D, Unreal, Procedural Generation

03/2024 – Present

- Reviewed and collected medical data to mitigate overfitting through data augmentation, addressing significant shortages.
- Developed a custom encoder-decoder model to convert brain cancer images into high-dimensional 15k+ RNA sequences and restored images from these sequences.
- Pretrained and fine-tuned Vision Transformer (ViT) models for improved image analysis.
- Automated the generation of synthetic datasets within a game engine for marine robotics research, streamlining data collection for experimentation.

SKILLS

Programming Languages: Python, Java, C, C#, JavaScript

Tools: Unity2D, Unreal, Unity3D, Maya, ZBrush, Rhino 3D

Data: Elastic Search, MySQL

Others: Video Game and Trading Card Game Design, Develop and Test, Game Concept Illustration, VFX, SFX, Scene Design, Light Baking, XR (VR, AR, MR) UI and UX