# QINGCHENG ZHAO

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# **EDUCATION**

## ShanghaiTech University, Shanghai, China

2021 – Present

Bachelor of Engineering in Computer Science. Expected graduation date: June 2025

- Overall GPA 3.71/4, ranked 19/179
- Major GPA 4.0/4.0.
- CS major courses taken:

SI100B Introduction to Information Science and Technology, A+

CS100 Introduction to computer programming, A+

CS131 Compilers, A+

CS101 Algorithms and Data Structures, A

CS177H Bioinformatics: Software Development and Applications, A

# **EXPERIENCE**

# DJI Technology Co., Ltd. Shanghai, China

Jun.2022 – Nov.2022

*Test Development Engineer (Internship)* 

- Built a Qt application utilizing ADB to collect, analyze, and visualize data from drones, resulting in improved data insights and decision-making for stakeholders.
- Developed a real-time visualization analyzer to collect and analyze 2.4Ghz, 5.2Ghz, and 5.8Ghz freq scan data from drones, enabling more accurate data interpretation.
- Utilized parallel computing techniques to speed up data processing and visualization, resulting in more efficient data analysis and a faster feedback loop.
- Profiled and optimized the existing system, resulting in improved application performance and reduced processing time for data analysis.

## Deemos Technologies Inc. Shanghai, China

Nov. 2022 – Present

Mar. 2022 - Present

Software Engineer (Internship)

- Created a real-time 3D interactive avatar system demo utilizing audio-driven facial expression technologies, which was showcased to thousands of attendees at GAIDC (Global AI developer Conference 2023).
- Lead the development of hyperhuman frontend, which is a web-based application that allows users to create/edit/animate/stylize 3D digital humans in the HYPERHUMAN platform, features include:
  - Using on a prompt, generate and edit 3D digital avatar models with high-fidelity PBR textures.
  - From a single photo, generate and edit 3D digital avatar models with high-fidelity PBR textures.
  - Automatic binding and RGB-video-based dirving based on massive 4D and expression data.(Zhang, Longwen, et al. "Video-driven Neural Physically-based Facial Asset for Production." SIGGRAPH Asia (2022))
  - Multilingual audio-driven 3D digital avatar.
  - Convenient stylization tool for 3D digital humans.
  - Automatic topology conversion.

view the demo at % twitter.

## **Multi-disciplinary Artificial Reality Studio**

Undergraduate Researcher

- Developed and implemented a high-precision color correction system for 3D scanning images, achieving an average color error rate of less than  $10^{-4}$ , resulting in improved accuracy and resolution for the images.
- Built an AI model using Nvidia StyleGAN2 and Pix2PixHD to synthesize high-quality 3D models textures from 2D images.

• Build an audio to 3D facial motion synthesis system, which can generate a sequence of realistic 3D facial motions with accurate lip movements given an audio input and a neutral 3D face mesh.

## **GeekPie Association**

Sep. 2021 - Present

President of GeekPie Association

- Developed a highly regarded web application that simplifies the course selection process for all students at ShanghaiTech University. People can comment and discuss freely at our platform. Check it out at % coursebench.
- Designed and built the frontend for G22G (also known as GeekPie 2022 Game), a popular web-based game that has received positive feedback from players. Check it out at % G22G.
- Created a visually appealing course scheduling web application that simplifies the process of creating and customizing schedules. Check it out at % CousePrettier or view the documentation at % documentation.
- Designed and developed the homepage for the Frontier of Life Science and Technology ShanghaiTech University (FoLST2021) conference, helping to increase awareness and participation in the event. Check out the source code at % github.

## **Teaching Assistant, CS100**

Feb. 2023 - Present

Senior Teaching Assistant

- Carry out weekly recitation.
- In charge of setting four programming assignments.

## SKILLS

- Programming Languages: Python > C++ >= Javascript == Typescript > C
- Development:
  - Web Development: Vue2 > React > Vue3 | Node.js, Gradio, HTML, CSS, Next.js, Vite.js, Three.js
  - Backend: FastAPI, Uvicorn
  - DevOps: Rancher, Docker, Kubernetes, Gitlab CI/CD, Github Actions
  - Tools: PyTorch, OpenCV, Blender

Web, Backend, Desktop Application, DevOps,

• Platform: Linux, Windows

### ○ Honors and Awards

Bronze Medal, Award on The 2021 China Collegiate Programming Contest, Harbin Site	2021
One-hundred Fourth Place, Award on The 2021 ICPC Asia-East Continent Final Contest	2021
First PrizeShanghai Makers Contest	2021

### i Miscellaneous

- Blog: http://clarivy.github.io/
- GitHub: https://github.com/Clarivy
- Languages: English Fluent, Mandarin Native speaker