

Yu Qian

📍 Singapore ✉ yuqian05@u.nus.edu ☎ +65 86567061 in yuqian 🌐 art blogs

Education

National University of Singapore *BS in Computer Science*

Aug 2023 – Present

- Second Major in Mathematics, Minor in Performing Art (Dance)
- Focus Areas: Artificial Intelligence, Parallel Computing
- Undergraduate Teaching Assistant: for CS1101S (Programming Methodology I) in AY24/25 sem1 and CS2040S (Data Structures and Algorithms) in AY24/25 sem2, conducted weekly two-hour sessions for computer science undergraduates. Received teaching award nominations from 4 out of 6 students for CS1101S tutoring.
- CCAs: Current member of NUSCD (NUS Chinese Dance), ex-member of Viva LatiNUS (NUS Latin Dance)

University of Washington *Student Exchange Program*

Upcoming: Sept 2025

- Selected for the School of Computing exchange program focusing on advanced coursework.

Artistic Experience

Yu Qian has a rich artistic background spanning dance, painting, calligraphy, and piano. Her creativity extends beyond traditional art forms, as she enjoys blending technology with art. In her first year at NUS, she participated in the *Beautiful Rune* competition for CS1101S (Programming Methodology I), where she coded a visually stunning image, earning her the Most Popular Award in the course. This fusion of technical skills and artistic expression reflects her unique ability to bridge the gap between logic and creativity.

Chinese Dance

- Began learning Chinese dance at the age of 3, specializing in ethnic and classical styles. Currently a member of NUS Chinese Dance.
- *Certification:* Attained the *Level 10 Certificate in Chinese Ethnic and Folk Dance* from the China Dancers Association at age 12.
- *Performances:* Performed the solo piece *An Ode to the Flower Lotus* at multiple events, including:
 - Zhejiang University Summer Camp Closing Event
 - Peking University Summer Camp Closing Event
 - The 2019 Double Ninth Festival at Anji County's nursing home for the aged
 - The Soh Bing Scholarship Summer Camp Closing Event

Calligraphy

- 8 years of experience in both soft brush and hard pen calligraphy.
- *Awards:*
 - **Aug 2017:** Second Prize (Calligraphy) at the Anji County Primary School Writing and Painting Competition.
 - **Oct 2017:** Second Prize (Secondary School Category) at the 3rd Anji County Youth Calligraphy Exhibition; work exhibited at the Wu Changshuo Memorial Hall.
 - **Nov 2017:** Excellence Award at the 5th Zhejiang Provincial Lanting Award Calligraphy Competition for Primary and Secondary School Students.
 - **Oct 2018:** First Prize (Hard Pen Calligraphy) at the Huzhou City Primary and Secondary School Art Festival.
 - **Oct 2018:** First Prize (Soft Brush Calligraphy) at the Zhejiang Provincial Primary and Secondary School Art Festival for the work *Three Poems by Cen Shen*.

Painting

- 6 years of experience in watercolor, gouache, and sketching, with a primary focus on gouache.
- *Award:* Third Prize in Graphic Design at the Zhejiang Provincial Primary and Secondary School Art Festival.

Piano

- 3 years of piano training, with basic proficiency.

Experience

Undergraduate Researcher

National University of Singapore

Singapore

Jan 2025 – Present

- Supervised by Prof. Yao LU, focusing on machine learning system research and exploring GPU time-sharing.

Computer Vision Research Intern

Beijing Freedo Technology Co., Ltd.

Remote

Dec 2024 – Jan 2025

- Developed algorithms for parameterized reconstruction of buildings using multi-view image analysis.
- Adapted and fine-tuned advanced neural network-based contour extraction models (e.g., LCNN) for architectural applications, including custom preprocessing and parameter optimization.
- Optimized vision-based algorithms to enhance performance and scalability for real-world engineering applications.

Software Engineer Intern

Computing for Voluntary Welfare Organizations

Singapore, Singapore

May 2024 – Aug 2024

- Collaborated in a team of 10 to develop full-stack software solutions for voluntary organizations in Singapore.
- Developed and maintained case management system (CMS) with React.js for responsive frontend interfaces and Golang/Ruby on Rails for robust backend services.
- Contributed to porting and enhancing features for the Lions Befrienders Service Association (LBSA), ensuring seamless functionality and improved user experience.

Achievements

GIC Computing for the Community Fellowship Award

Aug 2024

Awarded for successfully completing the CVWO program, contributing impactful software solutions for voluntary welfare organizations.

Dean's List

Jan 2024

Recognized for exceptional academic performance, placing among the top students in the cohort.

Soh Bing Scholarship

Jun 2023

Received this prestigious scholarship in recognition of academic excellence.

Skills

Programming Languages: Python, C++, C, Java, Ruby on Rails, Golang, React.js

Technologies: Pytorch, PostgreSQL, Parallel Computing (OpenMP, CUDA, OpenMPI)

Languages: Mandarin - Native speaker, English - Full Professional Proficiency (IELTS 8.0, Jul 2023)

Professional Development: participant of JPMorgan Winning Woman Program (Feb 2025)