Renate Nana Zhang
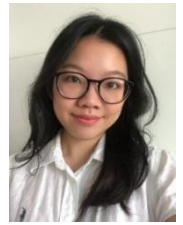
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EDUCATION

2023 - 2026	**Technical University of Vienna** MSc Media and Human-Centered Computing, English-taught

- Expected graduation in February 2026, current GPA 1.24 (Austria)

2024	**Beijing Institute of Technology** Exchange Student in MSc Computer Science, English-taught

- 4-month stay, focus on logic and digital design

2019 - 2023	**Technical University of Vienna** BSc Media Informatics and Visual Computing, German-taught

- Graduated with distinction, GPA 1.6 (Austria)

2021 - 2025	**University of Vienna** BSc Sinology, German and Chinese-taught

- Expected graduation in February 2026, current GPA 1.6 (Austria)

WORK EXPERIENCE

on-going	**Research Assistant, Aalto University, Helsinki**

- Generalizable Bayesian optimization method for physical-virtual co-optimization using a novel cost-aware approach (Python, ML)

2025	**AR Lab Technician, Snap Inc**

- Setup and execution of product testing session with Snap Inc's AR glasses Spectacles
- Support process and organize collected test data for analysis

2024	**Student Employee for Master's Course "Foundations of Ubiquitous Computing and IoT", Technical University of Vienna**

- Assistance for course team in preparing materials and grading assignments
- Tutoring of students in using a microcontroller (MicroPython, laser cutting, 3D printing)

2022 – 2023	**Internship for 12 months, Erste Digital GmbH, Vienna**

- Frontend Development of company software Erste Bank
- NgRx state management lifecycle, Angular, Typescript, HTML and CSS

PROGRAMMING EXPERTISE

on-going	**Master's Thesis, Immersive Real-Time Language Translator for Augmented Reality**

- Implementation of a language translation framework for AR glasses (Spectacles)
- Enabling real-time cross-language communication between multiple users
- Integration of Automatic Speech Recognition, Text-to-Speech technologies and Large Language Models in Snap's Lens Studio using JavaScript, TypeScript

2025	**Virtual and Augmented Reality: Advanced Topics, Printorial**

- Implementation of an interactive handheld AR application
- Immersive beginner tutorial on how to use 3D printer in UnrealEngine (Blueprints)

2024	**Virtual and Augmented Reality, Riddle Retreat**

- Implementation of a collaborative VR application for 2 players (HTC Vive)
- Collaborative puzzle solving game in Unity (OpenXR, C#)

2023	**Bachelor's Thesis, User Navigation Using Different Locomotion Techniques in VR**

- Exploration of different locomotion techniques, walking, steering and teleportation (HTC Vive)
- Development and evaluation of experimental platform in Unity (OpenXR, C#) with pilot study

SKILLS AND INTERESTS

Languages	German (native), English (C1), Mandarin (B2), Spanish (A1)
Technology	Java, C#, Python, JavaScript, Typescript, Unity, C++, HTML, CSS, SQL, MicroPython Git, Spring Boot, Angular, Figma, Bootstrap, Android SDK, OpenXR, Blender, CAD
Interests	Chinese History and Culture, Pilates, Badminton