

KEXIN (CLARE) CHEN

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EDUCATION

B.S. in Computing and Software Systems, The University of Melbourne Feb 2021 - Dec 2023 (expected)

- **WAM:** 87/100 **GPA:** 3.97/4.0
- Dean's Honor List (Top 3%)
- Relevant Courses: Design of Algorithms, Object Oriented Software Development, Element of Data Processing, Database System and Probability.

Exchange Student, School of Computer Science, Fudan University Sep 2022 - Jan 2023

- Relevant Courses: Pattern Recognition & Machine Learning, Computer Vision, and Entrepreneurship Practice.

PROJECTS

Text-to-Image Generation with Generative Adversarial Networks and Attention Mechanisms

Advisor: Xipeng Qiu (Fudan University) Nov 2022 - Jan 2023

- Investigated the performance of traditional neural network and GAN models for generating images from text
- Applied the attention mechanism to traditional neural network model and found that it resulted in generated images with more prominent focal points, but made the GAN model difficult to converge
- Proposed a new objective function for the generator and found that it improved the image quality
- Evaluated the generated images using MSE metric and visual inspection

De-Beautification: A GAN-based Approach to Recovering Face Images from Photoshopped Versions

Advisor: Jingjing Chen (Fudan University) Nov 2022 - Current

- Developed a GAN-based approach for image de-beautification, which recovered the original appearance of over-beautified images and restored them to a more natural state
- Used datasets SCUT-FBP5500 and FFHQ to evaluate the performance of the approach and compared the results to those of other existing approaches
- Applied make-up using BeautyGAN and used the Face++ API to apply filters and photoshopping to beautify faces in order to create the over-beautified images used as input for the approach
- Used LaTeX to produce a report discussing the potential applications and implications of the work for the field of image de-beautification

WORK EXPERIENCE

Co-founder & Software Development Engineer

Yuanheng Culture Company Sep 2022 - Current

Shanghai, China

- Co-founded a technology-focused culture enterprise that utilizes AR to enhance meditation by creating an APP and meditation devices that quantify meditation results and improve the meditation experience for users.
- Designed and developed a WeChat Mini Program enabling users to book courses and track their exercise data.
- Contributed to the creation of a positive corporate culture that promotes mental health and well-being.

Web Development Intern

Outin Cloud Computing Technology Company Aug 2022 - Nov 2022

Shanghai, China

- Built the web page using the framework *jQuery* and deployed it on the SaaS platform *Shopify*.
- Optimised web performance with *Google* developer tools and improved the loading speed by 100% using Lazy-Load, WEBP conversion, and other methods.
- Applied the knowledge of CSS and box model and used *Bootstrap* and *Sass* to design and beautify the page.

Data Analyst Intern

China Life Insurance (Group) Company

Dec 2021 - Jan 2022

Shanghai, China

- Analyzed and verified customer address information using Excel empowered by Python and successfully processed an average of 30,000 records per day.
- Processed the raw excel data, automated web queries using the module *requests*, and standardized address information using *pandas*, *numpy* and *matplotlib*.
- Achieved an accuracy rate of 100%, improved work efficiency by 200%, and completed 20+ data analysis reports.

PROGRAMS

Web Game Development: Rhythm Game with Sign Language Gestures

Jul 2022 - Aug 2022

Microsoft Engage Program

- Built a browser-based game to demonstrate the application of sign language, and for novices to exercise finger flexibility by frameworks *Vue*, *FastAPI* and *SQLite*.
- Implemented an open-source Hand Gesture Recognition algorithm *Mediapipe* and trained the model to recognize A-Z letter gestures by PyTorch.
- Visualized the rhythm to make the web game accessible to individuals with disabilities.
- Collaborated with Microsoft mentors, using *Scrum* methodology in development process for better productivity.

Unreal Engine 4 Development: Shooter Game

Aug 2022 - Oct 2022

Tencent Aurora Studios

- Developed proficiency in Unreal Engine 4 while creating a shooter game with Tencent.
- Utilized UE4 to design and implement game mechanics, environments, and character models.
- Improved skills in level design, scripting, and visual effects through the development process.

Visualization with Chinese Calendar Correspondence

Jul 2022 - Oct 2022

Peking University Visualization Summer School

- Participated in training in the fundamentals of visualization techniques and related information design.
- Completed team projects with students majoring in computer science, design, and others.
- Developed a website to display the visualization project by *Vue* and *D3JS*.

HONORS & AWARDS

Airwallex Excellence in Tech Undergraduate Scholarship

Oct 2022

Melbourne International Undergraduate Scholarship

Jan 2022

SKILLS

Programming	Python, Java, Javascript, C, MATLAB, SQL
Frameworks	Vue, jQuery, PyTorch, OpenCV, Paddle, Git
Language	Mandarin (Native), English (Fluent), Japanese (Basic)