YUE WEN

+86 18372892643 | wenyve17@163.com | dreamyuee.github.io/dreamyuee

EDUCATION

Shanghai Jiao Tong University Sep 2021 - Jul 2025
Bachelor of Engineering *GPA: 3.75/4.30 Grade: 88/100*
Relevant Courses: Ergonomics, Thinking and Methodology in Programming (C++), Data Structure

PUBLICATION

Co-authored*"Exploring embodied emotional communication: a human-oriented review of mediated social touch"* accepted for publication in CCF Transactions on Pervasive Computing and Interaction(TPCI), 2024.

RESEARCH EXPERIENCE

Research Leader Mar 2024 – Present
Center for Brain-like Computing and Machine Intelligence (BCMI),
Shanghai Jiao Tong University

- **Keywords: Affective computing, Haptic devices, EEG**
- Researched brain-computer interface technology, affective computing, and haptic feedback systems to explore the potential of tactile feedback in regulating negative emotions.
- Engineered 2 wearable devices and 3D-printed molds, resulting in a functional prototype that successfully delivered tactile stimuli.
- Designed experimental paradigms, optimized parameters through preliminary testing, and recruited and tested over 60 participants.
- Collected and analyzed multimodal physiological signals using machine learning (ML) and deep learning (DL) techniques to evaluate emotion regulation effectiveness.

Intern Jul 2023 - Sep 2023
The Future Laboratory, Tsinghua University

- **Keywords: Mediated Social Touch(MST), Wearable Devices**
- Conducted literature reviews and analyzed mapping strategies, helping to structure the emotional expression space for MSTs.
- Co-authored a paper offering a human-oriented approach to MST, with practical design guidelines for device form, body location, and tactile modalities.
- Used Keil IDE to write embedded applications in C++ for a microcontroller.

PROJECTS

GynCare APP Oct 2023 - Jan 2024

- Identified the target audience and conducted user interviews with 5 people to facilitate the ideation phase.
- Defined requirements and designed 15+ high-fidelity wireframes on Figma.

Bound by Love Game May 2024 - Jul 2024

- Designed a 2D RPG linear narrative game with a focus on storytelling and puzzle-solving interaction, including item and scene design, and challenge mechanics.
- Developed the game using Unity, implementing core gameplay mechanics, including item interaction and animation transitions.

HugMe System Sep 2024 - Oct 2024

- Designed the user interface for an app that provides emotional support to users.
- Modified a slap bracelet using Arduino and ESP32-CAM to monitor binge eating behaviors. Utilized FaceMesh to track chin movement and YOLOv8 to detect food.

VibraConnect System Oct 2024 - Nov 2024

- Co-developed a mobile app using Swift, integrating customized vibration modes with a wrist-worn device to enhance communication.
- Designed a haptic feedback prototype to facilitate touch-based emotional communication.
- Recruited 20 participants for testing and analyzed results using SAM and other scales, demonstrating significant improvements in emotional communication.

LEADERSHIP EXPERIENCE

Toy Tale: Children's Story-Teller Apr 2024

- Led a 5-student interdisciplinary team to integrate YOLOv7-tiny, Baidu's LLM, and Text2Image models on a Raspberry Pi for real-time object detection, voice interaction, and story/image generation.
- Delivered the solution in 600 lines of Python, reducing development time by 30% through effective team collaboration.
- Created an interactive storytelling system that garnered strong feedback during a university tech demo.

Nervousness Emotion Recognition Device Nov 2024 - Dec 2024

- Collected and edited 48 one-minute videos designed to trigger either nervous or calm emotions for use in the experiment.
- Led a 3-student team to develop an emotion recognition system using skin conductivity sensors and EDA data from 11 participants.
- Processed the data and trained a Linear Discriminant Analysis (LDA) model, achieving an accuracy rate of approximately 99% in emotion prediction.

AWARDS AND HONORS

- Third Prize, 4th "Cloud Han Cup" RoboMaster Campus Competition 2021
- Excellent League Member, Shanghai Jiao Tong University 2022 - 2023
- Excellent B Scholarship (Three Consecutive Years) 2022 - 2024
- Huawei Scholarship, Huawei Technologies Co., Ltd 2023
- Second Prize 2024
  China Collegiate Computing Contest - Mobile Application Innovation Contest
  (East China Region)

SKILLS

- **Design:** Personas, Journey Maps, Wireframing, Prototyping, Information Architecture, Surveys
- **Coding:** Python, C++, C#, MATLAB, Swift
- **Tools:** Figma, Photoshop, Unity2D, SolidWorks, Keil
- **Languages:** Mandarin, English

ACTIVITIES

- **Hiking:** Completed a 25-kilometer hike with one partner.
- **Event Organization:** Led the planning and execution of class team-building activities, as well as large-scale campus events such as stage performances and university festivals
- **Volunteering:** Contributed 200+ hours to community service, including serving as a nucleic acid collection volunteer during the pandemic and assisting at the Shanghai Marathon.