



TRL : 5



MANCH

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Docket : VR-1

Patent : NA

Description

Manch leverages Virtual Reality Exposure Therapy (VRET) principles to create a comprehensive training environment for university students struggling with public speaking anxiety. The platform simulates a realistic classroom environment with interactive virtual audience members who exhibit natural behaviors such as clapping, nodding, and asking questions. Users can practice delivering presentations with slide decks and engage in Q&A sessions, all within a controlled virtual setting that gradually helps reduce anxiety levels. The effectiveness of the intervention was validated through both quantitative measures (PRPSA scores) and qualitative interviews.

Features

- **Realistic Classroom Simulation:** Highly detailed virtual lecture hall environment that mimics university settings with accurate spatial dimensions, seating arrangements, and ambient sounds to create authentic speaking conditions.
- **Dynamic Virtual Audience:** Diverse audience members programmed with realistic behaviors like nodding, note-taking, showing signs of engagement or disinterest, and even exhibiting distracting behaviors to prepare speakers for various audience reactions.
- **Interactive Q&A System:** Sophisticated question generation system that produces contextually relevant questions based on presentation content, helping users practice thinking on their feet and responding to unexpected queries.
- **Integrated Presentation Controls:** Dual-display system with intuitive podium controls allowing seamless navigation between slides, similar to real-world presentation setups, enabling users to focus on delivery rather than technology management.
- **Progress Tracking and Analytics:** Built-in assessment tools that measure speaking performance metrics over time, including anxiety reduction (via PRPSA scores), speaking pace, eye contact patterns, and overall confidence markers.



Applications

- **Academic Presentation Preparation:** Integration into university courses requiring presentations, allowing students to rehearse specific assignments in a low-stakes environment before delivering to actual classmates.
- **Thesis and Dissertation Defense Training:** Specialized simulation mode for graduate students to practice defending their research work, including handling challenging academic questions and maintaining composure during expert interrogation.
- **Interview Skills Development:** Modified scenarios to simulate job interviews or graduate school admissions interviews, helping users prepare for high-stakes professional speaking situations.
- **Conference Presentation Practice:** Customized environments resembling academic conference settings where researchers can practice delivering technical material to peer audiences and handling expert questions.
- **Teaching Assistant Development:** Training program for new teaching assistants and instructors to build classroom presence and confidence before leading actual class sessions.

Use-cases

- **University Students with Glossophobia:** Students who experience moderate to high anxiety when delivering academic presentations, participating in class discussions, or speaking in educational settings.
- **Educational Institutions and Universities:** Schools can implement Manch as part of public speaking courses or communication skills development programs to systematically help students overcome presentation anxiety.
- **Academic Support Centers:** Campus resources focused on student success can offer Manch as a supplementary tool for students preparing for thesis defenses, comprehensive exams, or course presentations.
- **Mental Health Professionals:** Therapists and counselors working with anxiety disorders can utilize Manch as a structured intervention for clients specifically struggling with public speaking anxiety.

- **Non-Native Language Speakers:** International students or professionals who face additional anxiety when presenting in their non-native language can benefit from the controlled practice environment.

Theme

Technological specifications

- VR Head-Mounted Display
- 3D Virtual Classroom Environment
- Character Animation System
- Interactive Audience Simulation
- Slide Deck Presentation Integration
- Q&A Interaction System

Domain

- Education
- Research & Development
- Psychology

Theme

- Virtual Reality
- Digital Mental Health
- Interactive Learning

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