# Yijun Qian, PhD Candidate

### **EDUCATION**

Northeastern University.	Boston, MA
Ph.D. in Human Movement and Rehabilitation Science	2022 - 2026
Drexel University	Philadelphia, PA
M.S. in Human-Computer Interaction and User Experience	2020 - 2022
Communication University of China	Beijing, China
B.A. in Digital Media and Animation Creativity	2012 - 2016

## Research Experience

### Graduate Research Fellow | Boston, MA

2022 - Current

School of Clinical and Rehabilitation Science Bouve College of Health Science, Northeastern University Advisors: Dr. Leanne Chukoskie, and Dr. Miso Kim

- Explore sensory- and computer vision solutions on novel game interaction.
- Led evidence-based research on an innovative motion-control game that combines aerobic exercise and language learning to enhance cognitive function in older adults
- Developed and implemented a user-centered design framework for improving the accessibility of motion games for older adults and neurodivergent population.
- Investigated design methodologies by applying mixed-methods research approaches to examine the implementation of established game design patterns in games with clinically demonstrated cognitive benefits.

### Masters Research Fellow | Philadelphia, PA

2021 - 2022

College of Computing and Informatics, Drexel University Advisors: Dr. Jina Huh-Yoo, and Dr. Paul Diefenbach

- Spearheaded user research to identify pain points in conventional HIV risk assessment processes through clinician interviews and comprehensive literature review.
- Designed and conducted semi-structured interviews with local clinicians to uncover user needs and workflow challenges.
- Translated research insights into user-friendly data visualization tools, improving risk assessment accuracy and treatment decision-making for HIV clinics.

### Summer Research Fellow | Remote

2021-2022

School of Creative Media, City University of Hong Kong Advisors: Dr. Ray LC, and Dr. Xin Tong

- Designed experiment protocol for exploring the efficacy of using VR narrative and role-play game as an alternative tool to assess mental health.
- Developed virtual reality game environment in Unity.

## Working Experience

# Co-founder, Design Lead | Boston, MA

2024 - Current

**HospitalAlert** 

- Led UX, UI, and front-end development on a health emergency alert product.
- Worked with a cross-functional team, including initiating conversations with ER physicians and conducting user research with potential users.
- Structured user flow, onboarding, and main product features.

# Product Designer - User Growth | Beijing, CN

2017 - 2019

NetEase (NASDAQ: NTES)

- Led a cross-functional team (20 people) to design World Cup 2018 online event to support business sales and improve user retention during the event. Successfully sponsored by Haval Auto with \$3M in sales, improved daily user activity by 20% compared to usual levels.
- Developed storyboards, wireframes, and prototypes to communicate design and product strategy.

**AWARDS** AND **Honors** 

• Travel Funding, PhD Network, Northeastern University	2023, 2025
• Hackathon Winner, Philly Codefest 2022	2022
• Hackathon Winner, CCI Web App Design Competition	2022
• Dean's List, College of Computing & Informatics, Drexel University,	2021-2022
Academic Scholarship, Drexel University	2021-2022

### **PUBLICATIONS**

- 1. Qian Y, Lyman B, Zhang Y, Fan H, Zhang H, Wilds G, Barney C, Chukoskie L. From Lab to Living Room: Bridging the Researcher-Game Designer Gap in Motion Control Games for Aging Populations. ACM CHI Conference on Human Factors in Computing Systems, 2026 - under review.
- 2. Qian Y, Li Y, Lin L, Wang Z, Li M, Tong X, LC R. Virtual Reality Assessment: Using In-game Behaviors During Immersive Role-Play for Contextually Relevant Assessment of Fear of Intimacy. Journal in Frontier of Virtual Reality, 2025.
- 3. Qian Y, Schwartz A, Zhang Y, Kramer AF, Chukoskie L. Evaluating the Cognitive Impact of Exergames in Community-Dwelling Older Adults: A Systematic Review and Meta-Analysis. IMIR Serious Games - under review, 2025.
- 4. Qian Y, Schwartz A, Jung A, Zhang Y, Seitz U, Wilds G, Kim M, Kramer AF, Chukoskie L. The Influence of Separate and Combined Exercise and Foreign Language Acquisition on Learning and Cognition. Brain Sciences, 2024.
- 5. Qian Y, Schwartz A, Jung A, Zhang Y, Seitz U, Wilds G, Kim M, Kramer AF, Chukoskie L. Promoting Cognitive Health in Older Adults through an Exercise Game Centered around Foreign Language Learning. Extended Abstract ACM CHI Conference on Human Factors in Computing Systems, 2024.
- 6. Qian Y, Prajapati S, Schwartz A, Jung A, Zhang Y, Seitz U, Alfen J, Lewis L, Kim M, Kramer AF, Chukoskie L. Integrated Aerobic Exercise into Adult Second Language Learning in Virtual Reality Game. 2023 IEEE Conference on Games (CoG), Boston, MA, USA, 2023, pp. 1-4.

#### Poster

### Presentations

Qian Y, Schwartz A, Jung A, Zhang Y, Seitz U, Wilds G, Kim M, Kramer AF, Chukoskie L. Promoting Cognitive Health in Older Adults through an Exercise Game Centered around Foreign Language Learning, ACM CHI Conference on Human Factors in Computing Systems 2024, Honolulu, Hawaii, USA.

Qian Y, Schwartz A, Jung A, Zhang Y, Seitz U, Wilds G, Kim M, Kramer AF, Chukoskie L. Promoting Cognitive Health in Older Adults through an Exercise Game Centered around Foreign Language Learning. Measure Behaviors 2024, Aberdeen, Scotland.

Qian Y, Prajapati S, Alfen J, and Chukoskie L. 2023. Integrated Aerobic Exercise into Adult Second Language Learning in Virtual Reality Game. RISE 2023 Northeastern, Boston, MA, USA.

#### Oral

Qian Y, Lyman B. Integrated Pattern Language to Dissertation, 2025 Pattern Languages of Programs, People and Practices, WA, USA.

Qian Y, Prajapati S, Schwartz A, Jung A, Zhang Y, Seitz U, Alfen J, Lewis L, Kim M, Kramer AF, Chukoskie L. Integrated Aerobic Exercise into Adult Second Language Learning in Virtual Reality Game. 2023 IEEE Conference on Games (CoG), Boston, MA, USA.

### Academic Services

President of: Drexel International Graduate Student Association 2021-2022

Reviewers for: Journal of ACM Transactions on Computing for Healthcare

ACM CHI Conference on Human Factors in Computing Systems

Journal of IEEE Transactions on Games

IEEE Conference on Games

The Annual Symposium on Computer-Human Interaction in Play

### Teaching Experience

Teaching Assistant: PT6511 Research Method and Statistics, 2024-2025

Experimental Learning Group, 2025

PT6512 DPT Research Capstone Spring, 2025

INFO 690 User Experience Research Method, 2021

Mentored Students: Kaitlyn Lee, DPT candidate - Northweastern University

Joshua Van Alfen, MD candidate - Morehouse School of Medicine

Yichi Zhang, PhD student - Northeastern University

Sarvesh Prajapati, PhD student - Northeastern University

Zhaoze Zhang, MS - Northeastern University

Jiaxi Mai, PT - Northeastern University

Nitika Jain, MS - Northeastern University

Sophia Voller-Berdan - Northeastern University

Becky Zhang - Northeastern University

Neil Devnani - Northeastern University

Dylan Hong - Northeastern University

Geethanjali Ravichandra - Northeastern University

GRANTS

Meta Reality Lab | 149,924

Student Researcher

Twitchy Play: Learning to Play Fast Action Video Games with sEMG - Under Review

**TIER 1 NEU Grant** | 50,000

2023 - 2024

2025

Lead Student Researcher

Leveraging language learning and exercise to enhance cognitive and brain health.

Center of Brain Health Grant | 50,000

2023 - 2024

Lead Student Researcher

Leveraging language learning and exercise to enhance cognitive and brain health

NSF Future of Work at the Human-Technology Frontier | 2,586,000 2019 - 2024

Mentor and Student Researcher

Neurodiversity in tech: using interactive decision theory and augmented reality to enable employment for adults with ASD

SKILLS

- Research Behavioral Sensing, HCI Research, Health Informatics.
- Analysis R, Python, Physiological Data Analysis
- Design Adobe Illustrator, Photoshop, Figma, Miro
- Build Unity, HTML, CSS, Vibe Coding