HCI Researcher | UX Engineer | Product Manager

Wei-Lu Wang

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Product-minded HCI Researcher & Engineer with experience in Human-Centered Design and Product Management.

- **Product Leadership:** Expert in leading the **end-to-end product lifecycle** from uncovering latent user needs to architecting research-backed prototypes that solve complex social challenges.
- **Strategic Thinking**: Passionate about scaling Human-AI solutions that transform behavioral insights into quantifiable engagement, driving refined UX and strategic outcomes through data-driven iterations.

EDUCATION

Virginia Tech Aug 2025-May 2027

Ph. D in Computer Science | GPA 4.0

New York University Aug 2019-May 2021

Master of Science in Computer Science | GPA 3.8

National Chengchi University Sep 2014-Jun 2018

Bachelor of Science in Computer Science | GPA 3.75

PROFESSIONAL EXPERIENCE

PlateMate (Lead Researcher & Product Designer)

Virginia Tech, 2025–Present

- **Led a 42-day longitudinal study** across 27 families to define the design space of relatedness technologies; preliminary findings published at OzCHI 2025.
- Architected a Vue 3/Django AI interactive system map real-time actions to qualitative reflections with 100% data integrity.

IPS AI Chatbot (Product Designer)

Virginia Tech, 2026

- Directed a hybrid AI chatbot ecosystem using Rasa and LLMs to automate 70+ distinct user intents, integrating intent classification with generative synthesis for 24/7 automated consulting.
- Engineered an AWS auto-deployment pipeline that empowered non-technical staff to manage model updates independently, reducing manual service workload while maintaining system scalability.

Kinspire (Lead Researcher & Product Designer)

Virginia Tech, 2025

- Spearheaded the research strategy (N=34) for a 3-week mixed-methods study, identifying critical communication barriers in distant families; findings accepted at CSCW 2026.
- Architected a Vue 3/Django telemetry pipeline that synchronized 598 diary reflections and 92 gameplay sessions, maintaining a 99.9% system SLA during real-time data collection.

TubeWhale (Product Designer & Data Analysis Lead)

Virginia Tech, 2025–Present

- Architected an Django framework for modular AI-agent video analysis, utilizing asynchronous orchestration to ensure system responsiveness.
- Led a user study (N=12) demonstrating structured AI retrieval boosted user satisfaction by 55% by automating redundant research workflows.

Mission Realm (Product Manager & Researcher)

Virginia Tech, 2025-present

- Designed the game's dual-mode indoor/outdoor interface and mission logic, aligning spatial triggers and narrative pacing to increase cooperative task completion and immersive user experience.
- Established a design-ops workflow using Django with automated scaling benchmarks, real-time monitoring, and version-controlled documentation, maintaining 99.99 % system SLA.

DailyBean Empirical Study (Lead Researcher)

Virginia Tech, 2023

- Directed a 3-week diary study to investigate how sharing outdoor experiences via a diary app supports distant family communication. Conducted **thematic analysis** to identify communication patterns and emotional engagement mechanisms.
- Published and presented at CSCW 2025

Chatterbox Opener (Lead Researcher)

Virginia Tech, 2023

- Ushered a diary study combined with semi-structured interviews to explore how structured prompts can facilitate remote parent–child communication. Applied open coding and thematic analysis to identify conversational patterns and emotional engagement factors.
- Engineered the Chatterbox Opener system using **JavaScript, HTML, and CSS**, and integrated **Firebase** for backend support, including user reflection storage, prompt task management, and account authentication.
- Published and presented at CHI PLAY 2023.

TECHNICAL SKILLS

Programming Languages: HTML | CSS | Javascript | Python | C# | SQL
Frameworks & Tools: React | Vue | node.js |RESTful |MySQL | SQLite |Django| Unity | Docker | Figma | Git | AWS | Jira

LEADERSHIP

Fit to Draw (Research Mentor)

Virginia Tech, 2023

- Mentored a team of five undergraduate students in an **HCI research project**, focusing on user needs analysis, system design, implementation, and user study evaluation.
- **Orchestrated the technical roadmap and Unity-based architecture** for a multi-user co-drawing prototype. Led a cross-functional team to transition from concept to a functional system, enabling the investigation of new paradigms for **Location-based Game**. Published at CHI PLAY 2023.

Bun Appétit (Research Mentor & Product Manager)

Virginia Tech, 2024

- Guided a team of six through the full product lifecycle of a gamified HCI platform, winning First Place in the VTURCS program for excellence in undergraduate research.
- Engineered an automated Django starter pipeline that standardized API management and database schemas, slashing technical setup time and enabling the team to focus on custom feature engineering.
- Orchestrated a compressed 8-week sprint from initial user analysis to a 1-week pilot study, ensuring a research-backed UX and scalable system architecture under rigorous deadlines.

LandLink (Research Mentor)

Virginia Tech, 2025

- Won **First Place** in **VTURCS program**