

Zhuo (Prince) Niu

UI/UX Designer & AI Product Developer | Human Factors Engineering + Computer Engineering

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SUMMARY

"Bridging Code & Design for Scalable Web and Mobile Experiences"

- Human Factors Engineering M.S. student with a Computer Engineering background, focused on human-AI interaction.
- Build end-to-end mobile and macOS products, from interaction design to production-ready systems.
- Translate user needs into structured interactions, high-fidelity interfaces, and working software.

EDUCATION

Tufts University Medford, MA • Sep 2025 - Expected Dec 2026

Master of Science, Human Factors Engineering

Relevant Courses: Human-Machine System Design, Computer Interface Design, Advanced Research Methods, Applied Behavioral Statistics, Human Factors Product Design, Use-Related Risk Management

Purdue University West Lafayette, IN • Aug 2020 – Dec 2024

Bachelor of Science, Computer Engineering

Relevant Courses: Advanced C Programming, Data Structures, Microprocessor Systems and Interfacing, Computer Graphics, Operating Systems, Data Science, Artificial Intelligence, Computer Security, Data Mining

WORK EXPERIENCE

Porsche (Porsche Asia Pacific) Hong Kong, China SAR

UI/UX Designer Jun 2024 – Sep 2024

- Collaborated with **cross-functional design and engineering teams** to prototype UI components for Porsche's in-car system, supporting both touch and voice-based navigation.
- Developed **high-fidelity Figma prototypes and component specs** to clarify interaction details and streamline frontend handoff.
- Presented **design rationale and interaction flows** to align team members on usability goals, visual consistency, and technical feasibility.
- Optimized UI responsiveness and micro-interactions through iterative feedback, contributing to a **30% reduction in load time**.

China GPI Tech Shanghai, China

User System Developer Jun 2023 – Aug 2023

- Collaborated with **product and engineering teams** to design multimodal UX flows integrating voice, touch, and GUI interactions for an AI-driven user system.
- Mapped **user interaction scenarios** and refined NLP voice commands, improving speech recognition accuracy to **95%**.
- Presented and documented **input transition logic** to align developers on smoother handoff between voice and touch commands.

TECHNICAL SKILLS

AI & Agentic Tools

Prompt Engineering, AI-Assisted Coding, OpenAI Codex, Claude Code, RAG Systems, Dify, AI Agent Workflows, Human-AI Interaction, Whisper / Speech-to-Text

Programming & App Development

Python, Swift, JavaScript, TypeScript, React, React Native, HTML, CSS, Tailwind CSS, C/C++

Tools, APIs & Data

Git, GitHub, Firebase, Expo, Xcode, RESTful APIs, GraphQL, SQL, PostgreSQL, FastAPI

UI & Interaction Design

Figma, Design Systems, UI Components, Material Design, Human Interface Guidelines, Human-Centered Design, User Research, Usability Testing, Typography, Color Theory

PROJECTS

SayIt

Apr 2026

- Developed a **production-ready macOS menu bar app** for voice-to-text transcription, featuring global hotkey recording, live status feedback, and automatic clipboard copy.
- Integrated **Apple Speech and on-device Whisper via whisper.cpp**, enabling privacy-focused transcription with configurable engines and local model support.
- Designed and implemented a polished **SwiftUI/AppKit interface** with microphone selection, audio level visualization, HUD notifications, and bilingual localization.
- Shipped a **downloadable v1.0.5 release** through GitHub Releases with DMG packaging, Developer ID signing, notarization, Sparkle appcast updates, and versioned release workflow.
- **Tools Used:** Swift, SwiftUI, AppKit, AVFoundation, Speech Framework, CoreAudio, whisper.cpp, Xcode, GitHub

TrekAssist

Sep 2025 - Dec 2025

- Collaborated on a **Figma prototype** for a solar-powered e-ink national park guide designed for Yellowstone visitors under low-power, **1 Hz refresh-rate display constraints**.
- Conducted **usability testing with 9 participants**, tracking task success, completion time, errors, attempts, and ease ratings across six outdoor-use scenarios.
- Translated test findings into **design updates**, improving alert differentiation, battery-setting access, map readability, and persistent emergency access.
- Designed **safety-centered interaction flows** for weather warnings, ranger SOS confirmation, trail navigation, guided tours, visitor safety tips, and low-power settings.
- **Tools Used:** Figma, FigJam, Usability Testing, User Flows, Prototyping, Excel

The Posture Checker

Sept 2024 - Dec 2024

- Designed and developed a **multi-screen cross-platform React Native app** connecting to a physical posture-monitoring device via Bluetooth Low Energy for real-time posture tracking.
- Built interactive dashboards with **live posture status, daily goals, historical trends, and good-vs-slouch visualizations** to help users understand posture habits.
- Implemented **posture feedback loops with push notifications**, alerting users when poor posture persisted and supporting healthier behavior change.
- Created **system architecture, user flows, wireframes, and high-fidelity prototypes** in Figma to guide mobile UX, hardware integration, and product iteration.
- **Tools Used:** React Native, Expo, BLE, Arduino, Xcode, Firebase, Figma, Xmind

The Little Lemon App

2024

- Designed and prototyped a **restaurant booking app** that supported menu browsing, ordering, and end-to-end reservation flows.
- Created **high-fidelity Figma prototypes** for mobile and responsive layouts, improving visual hierarchy and navigation clarity.
- Refined **filter interactions, restaurant cards, and bottom navigation** to reduce friction for first-time diners.
- **Tools Used:** Figma, Xmind

PROFESSIONAL CERTIFICATES

Google UX Design Professional Certificate

2024

Coursera

- **Skills Acquired:** User Research, Wireframing, Prototyping, Figma, User Experience Design, Usability, Mockups, Low-Fidelity & High-Fidelity Prototypes, User Interface

Meta iOS Developer Professional Certificate

2024

Coursera

- **Skills Acquired:** Swift, Apple iOS, React Native, iOS Development, Core Data (Software), React.js, Version Control, UI/UX Research, Design and Product