

Yiguan Liu | Design Engineer

London, UK (SW11 2NP) · +44 7784 365080 · anthony.liu218@gmail.com
yiguanliu.com · linkedin.com/in/yiguan-liu-202985127 · synthlab.io

I'm a design engineer and product designer with 5+ years across multiple media, specialising in data-driven B2B product development and scalable system architecture for intelligent front-end user interfaces. I care deeply about product thinking, interaction quality, and crafting seamless human experiences.

EXPERIENCE

Product Design Engineer — Journey | Squint/Opera, London

Jan 2025 – Present

Design, prototype, develop & ship visual features across 3D spatial layouts, interface systems and client-facing materials
• Build & maintain a scalable design system bridging Design and Engineering • Leverage AI agentic workflows and custom tooling to accelerate iteration • Partner with engineers to optimise performance in complex interactive systems

Real-time Experience Designer — Foster + Partners, London

Jun 2022 – Nov 2024

Led creative production of real-time architectural experiences for global, high-profile clients, concept to delivery • Managed end-to-end real-time app production pipeline (physics tuning, asset validation, environment QA) • Built in-house Python scripts, editor utilities and Unreal Engine plugins to improve team throughput

Technical Director (Contract) — One Pixel Brush, London

Feb 2024 – May 2025

Owned environment look-development and physics-based rendering for AAA entertainment properties — spatial geometry, materials, lighting across large 3D scenes • Produced & validated 3D assets to production spec under rapid timelines for global clients

Computational Designer — Zaha Hadid Architects, London

Sep 2021 – Jun 2022

Designed complex physical environments with parametric tools (Rhino, Grasshopper) under rigorous spatial, structural and material logic • Produced real-time walkthrough environments in Unreal Engine, translating design intent into navigable simulations

Motion Designer — XPENG, Shanghai

Jun 2019 – Aug 2019

Contributed micro-motion design for automotive central-display HMI; supported lighting system visual design and motion documentation

FOUNDER VENTURES

SynthLab (synthlab.io) — Co-founder · Synthetic data / service

Jun 2026 — Present

Bespoke synthetic data for AI/ML training. 'Real2Sim' pipeline captures real references, builds parametric scenes in Unreal Engine, renders photoreal frames with pixel-accurate ground truth (bounding boxes, segmentation, metadata); MuJoCo physics integration in progress. Starting in manufacturing fault / edge-case detection.

Hidden Lake(R) — Founder · Wearable tech / design studio

Apr 2024 — Present

Independent studio building smart hardware and AI-native products. Leading the design of next-gen AI wearable product that combines sensor data, AI model and human-machine interface.

SELECTED PROJECTS (YIGUANLIU.COM)

- Nothing Phone 2(a) — Product Design
- Circular Motion OS Agent — Sales App
- Amber Memory — AI Relationship & Memory App
- Apple AirPods Pro — Marketing App
- CDG / HOMME PLUS - Brand Asset Generator
- Dataform — Spatial Intelligence Platform
- XPENG P7 — Motion System

SKILLS & SOFTWARE

Front-End & UI

React, Next.js, TypeScript, TailwindCSS, Shadcn/ui, CSS, Figma, Motion

Systems & Architecture

Design Systems, Semantic Tokens, Component Architecture & Frameworks

AI Product Design

MCP, LLM, Generative AI UX, Agentic Interfaces, Prompt Engineering

Motion & Visual Craft

Unreal Engine, Rive, Houdini, KreaAI, Cavalry, Brand Identity, Art Direction

EDUCATION

Master of Architecture (Distinction) — The Bartlett, UCL

London, UK · 2020–2021

Bachelor of Design — Architecture & Landscape Architecture, UBC

Vancouver, CA · 2016–2020