Christian Yongwhan Lim

New York, NY
yongwhan@yongwhan.io
yongwhan.io | linkedin.com/in/yongwhan

CHIEF ARCHITECT | AI SYSTEMS RELIABILITY | TECHNICAL LEADERSHIP

AI systems architect and engineering leader with fifteen years across Google, Two Sigma, and startups, turning consequential decisions into dependable business workflows through explicit state, evaluated tool use, observability, and recovery.

PROFESSIONAL EXPERIENCE

Chief Architect | Probook

Sep 2026-present | AI operating system for home services

- Lead cross-functional architecture and production delivery for dispatch, orchestration, workflow state, observability, and recovery.
- Define bounded dispatch decisions that operators can inspect, revise, or defer while keeping scoring logic and internal measurements private.
- Built workflow evaluation and trace review that turn production failures into release gates and owned remediation.

VP Engineering | Arklex AI

May 2025-Aug 2026 | Agent-first platform

- Architected and led the open-source Agent-First Organization framework: task-graph execution, orchestration, distributed workers, and production observability.
- Unified Shopify, HubSpot, and RAG delivery paths; aligned platform and agent teams through typed APIs, CI, monitoring, security review, mentoring, and hiring standards.

Founder and principal engineer | Startup roles

Apr 2023-Apr 2025 | New York

- **CEO & Co-Founder | Stealth AI Venture** | Oct 2024-Apr 2025 - raised initial funding and built the agent-automation infrastructure and go-to-market foundation from zero.
- **Principal Engineer | Fun.xyz** | Jul-Sep 2024 - rebuilt production test infrastructure and acceptance gates for high-volume transaction paths.
- **Co-Founder | Christian and Grace Consulting** | Apr 2023-Jul 2024 - delivered technical consulting and mentoring.

Senior Quantitative Software Engineer | Two Sigma

Jul 2022-Feb 2023 | Derivative modeling and trading systems

- Implemented fixed-income quantitative strategies plus alerting and analytics tools that improved visibility into execution-system behavior.

Research Software Engineer and Tech Lead | Google

Oct 2016-Jun 2022 | Ads, Brain, TensorFlow Runtime, ML Research

- Built production software in Google Ads and Core (2016-2019), then shared infrastructure for deep-learning research workloads and TensorFlow Runtime (2019-2021).
- Led applied ML from experiment through product integration, coordinating research and engineering delivery (2021-2022).
- Tech lead for Google Kick Start Practice Rounds (2020-2021); the broader Kick Start program reached 110,000+ participants worldwide.

CORE CAPABILITIES

AI systems: agent architecture | dispatch systems | tool execution | workflow state | evaluation | observability | recovery
Platforms: LLM APIs | RAG | Shopify | HubSpot | distributed systems
Stack: Python | C++ | FastAPI | LangChain | PostgreSQL | Redis | Docker | AWS | CI/CD

SELECTED TECHNICAL WORK

Persona reliability measurement

Independent multi-model evaluation | 2026

- Passed 80/80 reproducibility checks and quantified context-length stability across six dimensions: 250-token windows tracked full-document scores at Pearson r=0.91-0.96, versus r=0.71-0.76 at 100 tokens.

Cascade centrality

With Josh Alman | Submitted to ITCS 2027

- Submitted an exact-complexity and approximation result; built exact-rational enumeration and explicit counterexamples for follow-on structural and network-augmentation work.

ICPC contest engineering

Chief Judge, Mid-Central | 2026

- Led delivery of 14 Division 2 problems through Kattis setup, independent solutions, generated data, cross-regional testing, advisory review, and release repair.

LEADERSHIP

ICPC Foundation

Director of Internships; Symposium Chair; Curriculum Co-Chair; Senior Editor

- Built the program to 136 completed internships with 9.6/10 feedback across 86 responses; co-lead a 50+ topic curriculum with 50,000+ downloads; launched the Journal of Competitive Learning's inaugural issue.

Columbia University

Adjunct Associate Professor of Computer Science | Jan 2025-present

- Associate in Computer Science (Adjunct), Jan 2022-Dec 2024; delivered 14 course offerings to 500+ students, built a 429+ member community, and coached two World Finals teams, including the 2024 North America silver medalists.

EDUCATION

Massachusetts Institute of Technology | Doctoral studies, Operations Research | 2013-2016 | Degree not completed; advisor: Asuman Ozdaglar

Stanford University | MS, Computer Science (AI), 2013 | Advisor: Fei-Fei Li

Stanford University | BS with Honors, Computer Science and Mathematics, 2011 | Advisor: Persi Diaconis

SELECTED PUBLICATIONS

637+ citations across computer vision, networks, programming systems, and competitive learning.

Accurate Data Race Prediction in the Linux Kernel through Sparse Fourier Learning | OOPSLA 2024

Competitive Rumor Spread in Social Networks | SIGMETRICS PER 2017

Object Bank: An Object-Level Image Representation for High-Level Visual Recognition | IJCV 2014

SELECTED HONORS

ICPC Mexico Trainer Recognition (2026) | Outstanding Problem Advisory (2025)

Outstanding Mentorship - Quatrefoil Medal (2024, 2025) | ICPC North America Excellence in Leadership Award (2023)