

# Wenhan Zhou

## AI Systems Architect

AI-native product architecture · founder-level strategy · quantitative depth · high-agency execution

📍 Uppsala, Sweden (open to Stockholm / relocation) · ✉ Email · [in](#) LinkedIn · [GitHub](#) · [Website](#)

### SUMMARY

Cross-domain builder combining scientific training, AI-native workflows, and founder-level execution. I enjoy entering unfamiliar domains, building first-principles understanding, and turning ambiguity into working systems, products, and research. AI amplifies my ability to operate across technical, product, and organizational boundaries.

### EXPERIENCE

#### Technical Lead (CTO) — Spucce Venture

2026

*Turned an AI venture-studio vision into a concrete product, architecture, and investor roadmap.*

- Translated broad venture-studio vision into Slack-agent MVP scope, memory/RAG strategy, and 3-month execution roadmap.
- Designed technical direction around AI agents, company memory, Slack-native workflows, and venture-engine infrastructure.
- Made technical and organizational trade-offs across infrastructure, AI-agent tooling, MVP scope, and coordinated team execution under pre-seed constraints.
- Produced investor-facing architecture narrative, product strategy, and technical execution plan.
- Established AI-native engineering standards and best practices.

#### Researcher — Uppsala University

2023 – 2025

*First-author peer-reviewed scientific article based on BSc thesis. [Paper](#)*

- Developed temporal neural-network surrogate models for nuclear fuel-rod simulations, reducing evaluation time from hours to ~10ms per thousand fuel rods.
- Identified that Temporal Convolutional Networks and Fourier Neural Operators are complementary for temporal surrogate modeling.
- Built a Python data pipeline for Fortran simulation output with no existing library support.
- Diagnosed an MSE loss degeneracy in near-zero outputs through feature visualization and designed a custom loss to resolve it.

### SELECTED WORK

#### Decision Brief

2026

*AI system that helps people make decisions under uncertainty and difficult trade-offs. [Live App](#)*

- Shipped end-to-end in 3 weeks by treating the architecture as the stable anchors and AI as the execution layer. [Essay](#)
- Simplified the landing page after observing live user hesitation.
- Integrated database (SQLite) to monitor non-sensitive user data.
- Removed web-search to maintain a GDPR compliant solution.
- Enabled paid usage via Stripe with automated refund fallback at failure.

#### ReadMe — Memory System

2026

*Filesystem-based memory layer for AI agents, exploring inspectable long-term memory beyond vector search. [Project](#)*

#### Sara — Voice Agent

2026

*macOS voice assistant prototype with speech-to-text, animated desktop avatar, and sandboxed agent actions.*

## EDUCATION

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### Human Cognition & AI – Uppsala University

2025 – 2026

*Explored human learning as a bridge between cognitive science, HCI, physics-inspired learning theory, and AI.*

- Developed a cognitive science framework for AI-assisted development used to ship fast while maintaining understanding.

### MSc Data Science – Uppsala University

2023 – 2025

**Thesis:** [Uncertainty Quantification for Receiver Operating Characteristic Curves](#)

*Developed finite-sample, distribution-free confidence bands for ROC curves by reframing ROC uncertainty as conditional CDF uncertainty.*

- Used probability integral transform, order statistics, bootstrap, Beta-Binomial modeling, and Monte Carlo simulation to study uncertainty in classifier evaluation.

### BSc Physics – Uppsala University

2020 – 2023

**Thesis:** [Deep Neural Networks as Surrogate Models for Fuel Performance Codes](#)

*Added an encoder-decoder reconstruction check to flag unreliable out-of-distribution fuel-rod predictions without rerunning the fuel-performance code.*

- Originally scoped as a master's thesis; awarded Sigvard Eklund Prize for Best Nuclear Engineering Thesis (30,000 SEK).

## CORE TECHNICAL RANGE

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OpenClaw · Hermes · RAG / memory systems · statistical ML · uncertainty quantification · Python · TypeScript · PyTorch · scikit-learn · OpenAI/Gemini/Cerebras APIs · Git/Bash/Docker · SQLite/GCP

## LANGUAGES

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Swedish (fluent) · English (fluent) · Chinese (native)