

# Yuhang (Jason) Sang

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## Summary

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CS undergrad building AI-powered design workflows and scalable UI systems. I design reusable component patterns (tokens, theming, interaction primitives), wire AI into design context, and streamline design→code handoff through structured schemas, export pipelines, and developer-friendly docs. Comfortable with complex, user-facing prototypes and collaborating with designers, researchers, and engineers.

**Focus areas:** Design systems & adoption at scale · AI-assisted creation workflows · Design→Code handoff (schemas, tokens, components) · Developer experience

## Education

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### University of Minnesota – Twin Cities

Expected Dec 2025

B.A. in Computer Science

GPA: 3.76

*Selected Coursework (scores):* Advanced Mathematics (98), Statistics (97), Machine Learning Fundamentals (97), Data Structures (98), C++ (94), Python (90), Big Data Analysis (96), Explainable AI & Visualization (94)

## Relevant Experience

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### Research Intern – Duke Kunshan University (DKU)

May 2025 – Aug 2025

Mentors: Prof. Yucheng Jin, Prof. Hua Shen (New York University)

*Project: Dual-Alignment Scientific Writing Assistant (AI design workflow + design→code hand-off)*

- Built a reusable React component set (goal panels, dual heatmaps, strategy chips) with design tokens (spacing/typography/color via CSS variables) to ensure consistency and rapid iteration.
- Implemented AI workflows that read design/context state (author goals, reviewer personas) and produce structured JSON specs (objectives, strategies, alignment scores) consumable by the UI.
- Shipped a design→code handoff path: schema-validated outputs, typed adapters, and developer docs so generated designs/strategies render directly in the component library.
- Partnered with mentors and pilot users to refine interaction patterns, measure adoption, and improve comprehension.
- Demo: [github.com/SyhiJason/AugmentedCreativity-frontend](https://github.com/SyhiJason/AugmentedCreativity-frontend)

### Research Intern - ZheJiang University

Jun 2024 – Sep 2024

Zhejiang University

*project: Turn Fragmentation into Opportunities: Weaving HCI Artifacts into Design Implications via LLM Agent Collaboration*

- Prototyped multi-agent prompts that transform design briefs into component-ready proposals, emphasizing repeatable patterns over one-off mockups.
- Contributed evaluation rubrics for consistency and reuse, aligning outputs with a seed component set and nomenclature.

- Investigated complex model behavior and built visualization components explaining policy rationale.
- Delivered user-facing insights for stakeholders, demonstrating ability to tackle deep, technically complex problems.

## Additional Experience

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The University of Hong Kong – Data Science & Machine Learning Program 2023

## Skills

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**Design systems & handoff:** design tokens (CSS variables), component libraries, interaction patterns, typed adapters, schema design & validation, developer docs

**AI & workflows:** LLM orchestration, prompt/response schemas, alignment scoring, explainability basics

**Frontend & tooling:** React, Node.js, Python, C++, OCaml, SQL (MySQL), PyTorch, Git, Web Scraping, CSS

**Communication:** cross-functional collaboration, research writing (LaTeX), stakeholder demos

## Selected Highlights

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- **Adoption & consistency at scale:** Created tokens and reusable components to standardize visuals and interactions across prototypes, and wrote clear documentation so teammates could reuse patterns without re-implementing them.
- **AI-powered workflows:** Connected AI to design context (e.g., user goals and personas), enabling it to generate structured specs that the UI could directly render, reducing manual translation work.
- **Design→Code handoff:** Built schema-validated outputs, typed adapters, and sample stories, allowing designers and researchers to hand generated designs straight to developers with minimal friction.
- **Complex, user-facing projects:** Delivered interactive visualizations and explanation components for reinforcement learning research, refining them through iteration with real users and mentors.
- **Communication & adoption:** Led design reviews, set up usability feedback loops, and produced clear docs that helped non-engineers quickly adopt and use the system.