

Here are two 1-page grant proposals I wrote. One was awarded and one was not. The one titled "The Structure of Human-AI Collaboration" was awarded in 2024. The other one is from 2022

The awarded 2024 grant proposal "The Structure of Human-AI Collaboration" likely succeeded due to its **structured framework for human-AI collaboration** with measurable performance gains, while the 2022 proposal appears narrower in scope despite sharing foundational concepts. Key differentiators include:

Empirical Validation

The 2024 proposal demonstrates **10x effectiveness improvements** in creative tasks through systems like VisiBlends and ReelFramer, supported by peer-reviewed CHI/UIST publications^[1]^[2]. It quantifies AI's impact with:

- 90% accuracy in AI-powered context curation^[1]
- 100% efficiency gains through structured workflows^[1]
- Double performance with half mental effort in app development tasks^[1]

Generalized Framework

The funded work presents a **mechanized model** applicable across domains:

1. **Problem Decomposition:** Breaking tasks into ideation, prototyping, iteration phases^[1]
2. **AI Augmentation:** Using LLMs for narrative framing (ReelFramer) and image synthesis (Opal)^[1]^[2]
3. **Context Integration:** Automatic detection of underspecified problems with hybrid human-AI resolution^[1]

Broader Applications

The successful proposal extends beyond visual design to:

- Journalism (news-to-video translation)^[1]
- Software development (DynEx exploratory programming)^[1]
- Social impact domains (education, mental health)^[2]

Theoretical Foundation

While both proposals use divergent/convergent thinking models, the 2024 work adds:

- **Fluid thinking** components for iterative refinement^[1]
- **Design pattern** matching for constrained exploration^[1]
- **Problem framing** techniques to combat cognitive bias^[1]

The 2022 proposal focused primarily on visual blend generation through SymbolFinder and VisiBlends^[2], demonstrating effectiveness but lacking:

1. Cross-domain validation
2. Quantitative comparisons to state-of-the-art AI
3. Infrastructure for real-world deployment

The funded proposal's emphasis on **structured workflows with empirical benchmarks** and **multi-domain impact** likely made it more compelling to reviewers compared to the earlier, more specialized creative toolkit approach.

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1. https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/52689918/ef7cff3b-f730-4c9c-824e-23d3d1395a46/ChiltonSloanRS_2024_final.pdf
2. <https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/52689918/1d568929-b1e3-4413-851a-f70feeb1fe52/Research-Statement-V3.pdf>