



SOLIDWORKS INTERNAL AI AGENTS

Bill Xia

Intern - Roles Portfolio Manager



3DEXPERIENCE®

QUICK BIO

Who Am I?

AI Product Management Intern on Salih Alani's team

Background

- B.S. Computer Science from Tufts University, minors in Math and English
 - Thesis Title: *"Grounding LLMs with Natural Language"*
- Former Research Intern at the National Institutes of Health
 - Authored 2 papers on biomedical NLP

Interests

- AI Agents, Lightweight LLMs, Machine Translation
- Bouldering, Creative Writing, Language Learning



TABLE OF CONTENTS

Project Background

Methods

Results

Next Steps

PROJECT BACKGROUND

Why Am I Here?

The Problem – PM Content Creation

- Too much time each quarter is wasted on repetitive content creation tasks:
 - Writing Value Delivered and What's New content
 - Copy-pasting data to and from RFL
- Content creation is important for keeping stakeholders informed, but it diverts resources away from refining the projects themselves.

The Solution – RFL Agent

- **Faster Search.** Automate searches across projects, roles, ERs, and other RFL data sources.
- **Clearer Summarization.** Isolate key information from PES documents and 3DSwym wiki pages.
- **Stronger Communication.** Generate Value Delivered and What's New content according to user-defined specifications.



TABLE OF CONTENTS

Project Background

Methods

Results

Next Steps

METHODS

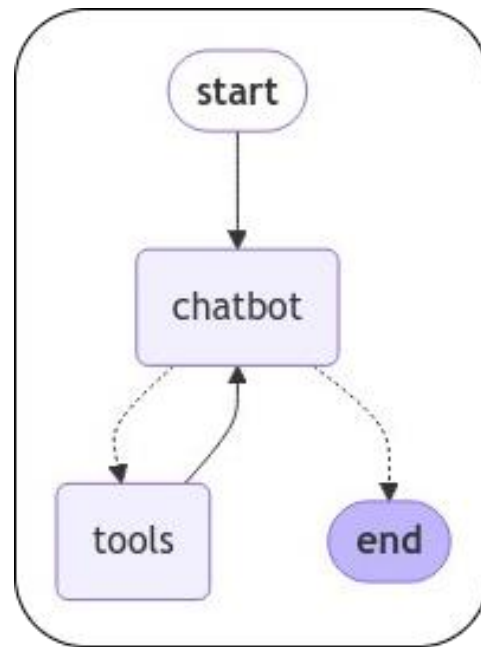
AI Agents

AI Agents

- Autonomous computer programs that can absorb information, make decisions, and take actions relevant to a specific task.
- Modern agents are powered by Large Language Models (LLMs) like GPT or Claude, but enhanced with additional capabilities.

Advantages Over Chatbots Alone

- **Reliability.** Execute complex tasks with rule-based tools and up-to-date data sources.
- **Security.** Share proprietary information without worrying about data leaks with locally-hosted AI agents.
- **Autonomy.** Stay focused on high-impact tasks by delegating grunt work entirely to the agent.



AGENTIC WORKFLOW

TABLE OF CONTENTS

Project Background

Methods

Results

Next Steps

RESULTS

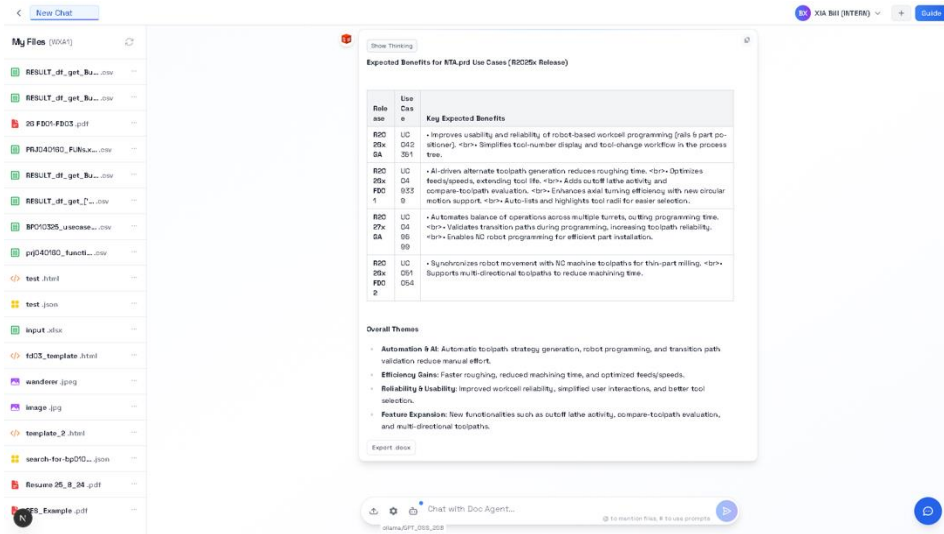
The State of the Agent

The Platform

- Intuitive chat interface simplifies RFL workflows. Everything is centralized in a clean, minimalist UI.
- Upload files and custom prompts to tailor workflows to your specific use cases.

Value Unlocked

- **Autonomous Workflows.** Summarize hundreds of text entries in minutes, all with a single query.
- **Focused Iteration.** Workshop Value Delivered and What's New content without needing to provide context.
- **Grounded Insights.** Keep content up-to-date and eliminate copy-paste errors by pulling information directly from the source.



THE RFL AGENT

TABLE OF CONTENTS

Project Background

Methods

Results

Next Steps

NEXT STEPS

Scaling for Broader Impact

Gathering User Feedback

- Deploy the agent for Product Management and other teams to test on various RFL workflows.
- Collect user feedback on usability and limitations to inform future development.

Long-term Enhancements

- **Strengthen Data Confidence.** Improve accuracy and reliability by refining summarization pipelines and data analysis tools.
- **Context Tuning.** Enhance the agent's understanding of DS workflows and data sources with better prompting and/or retrieval systems.
- **Sustained Development.** Ensure constant refinement and developer expertise by forming a dedicated team.



FUTURE WORK

