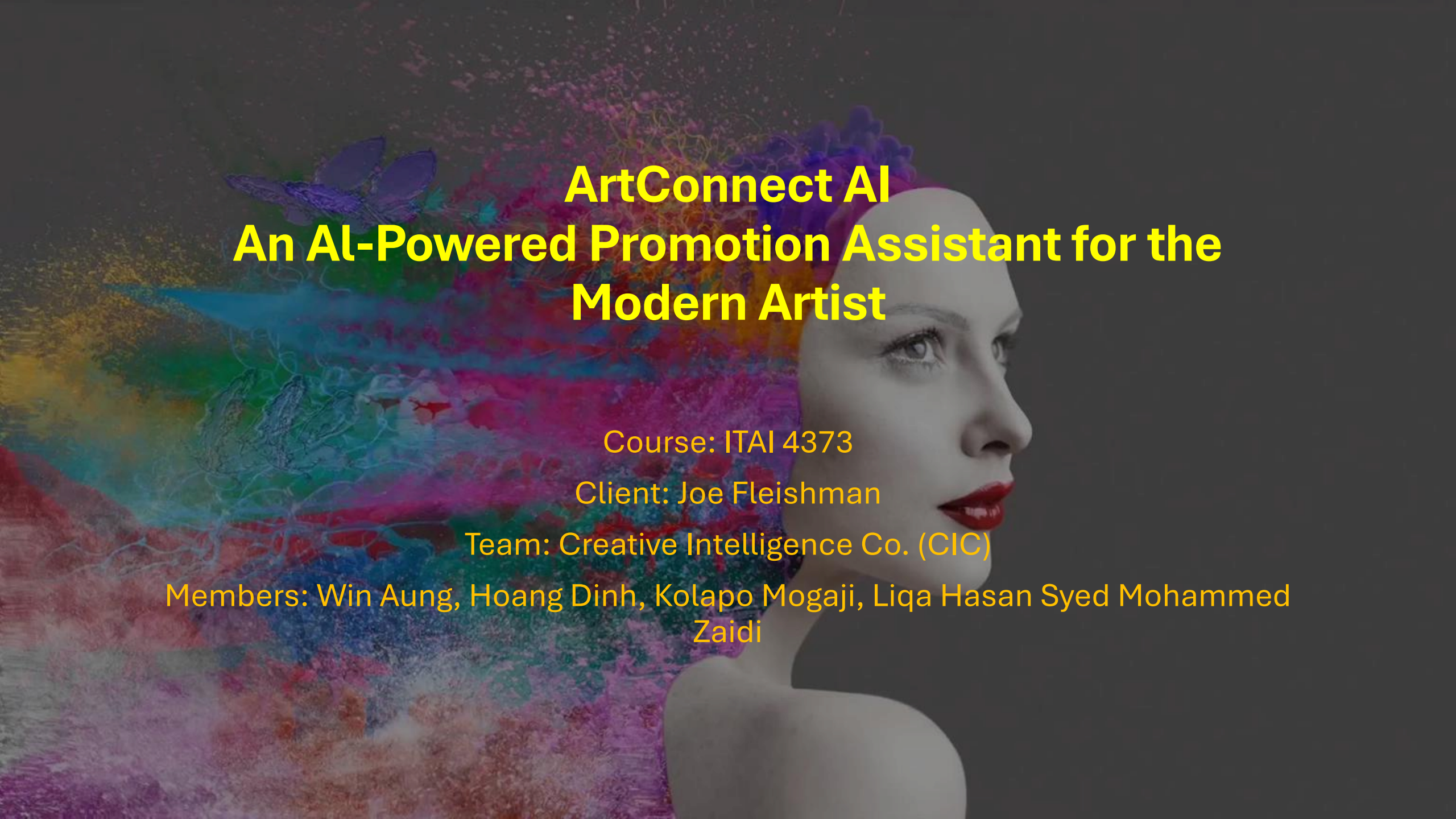


ArtConnect AI
An AI-Powered Promotion Assistant for the Modern Artist

Course: ITAI 4373

Client: Joe Fleishman

Team: Creative Intelligence Co. (CIC)

Members: Win Aung, Hoang Dinh, Kolapo Mogaji, Liqa Hasan Syed Mohammed Zaidi

The ArtConnect AI Proof-of-Concept

What It Is

A bespoke AI tool that monitors social media platforms to identify high-potential engagement opportunities for artists.

It scores leads, suggests personalized replies, and provides actionable analytics via a simple dashboard.

Why It Was Built

To empower independent artists like our client, Joe Fleishman, by automating the time-consuming process of digital promotion and audience engagement.

Who It's For

Our client is Joe Fleishman, a professional artist seeking to increase his online visibility, connect with buyers, and dedicate more time to his creative work.

The **Modern Artist's Dilemma**: Drowning in Digital Noise

For artists like Joe, creative talent is no longer enough. Success requires constant online engagement, a full-time job in itself.

Finding Buyers

Manually sifting through thousands of interactions to find genuine collectors, galleries, and patrons is inefficient and often fruitless.

Low Engagement

Generic interactions fail to build a loyal community. Meaningful connection requires personalized, consistent communication

Time Scarcity

Every hour spent on social media is an hour not spent creating art. This administrative burden directly impacts creative output.

Limited Visibility

Breaking through the noise to reach a wider, relevant audience is a constant struggle against platform algorithms.

Our Strategic Goals: Intelligent Amplification, Not Automation

The goal is not to replace the artist, but to provide an intelligent assistant that enhances their reach and effectiveness.

1

Human-in-the-Loop by Design

Ensure the artist (Joe) retains full control over his voice and interactions. Every Al suggestion requires human approval. This is an ethical cornerstone.

2

Surface High-Value Opportunities

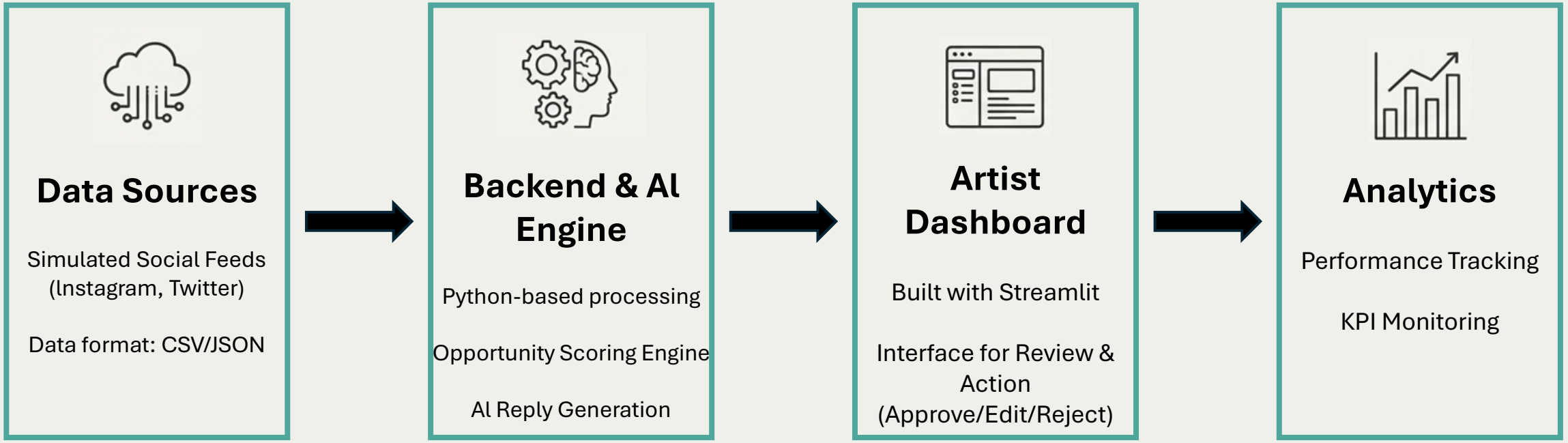
Move beyond vanity metrics. Focus on identifying and prioritizing interactions that lead to sales, gallery representation, and meaningful connections.

3

Reclaim Creative Time

Drastically reduce the manual effort of social media monitoring, giving the artist more time for what matters most: creating.

System Architecture: A High-Level Blueprint



The Technology Stack

Python: The core programming language for all backend logic and data processing.

CSV/JSON Datasets: Simulating real-time data feeds from social platforms for this proof-of-concept.

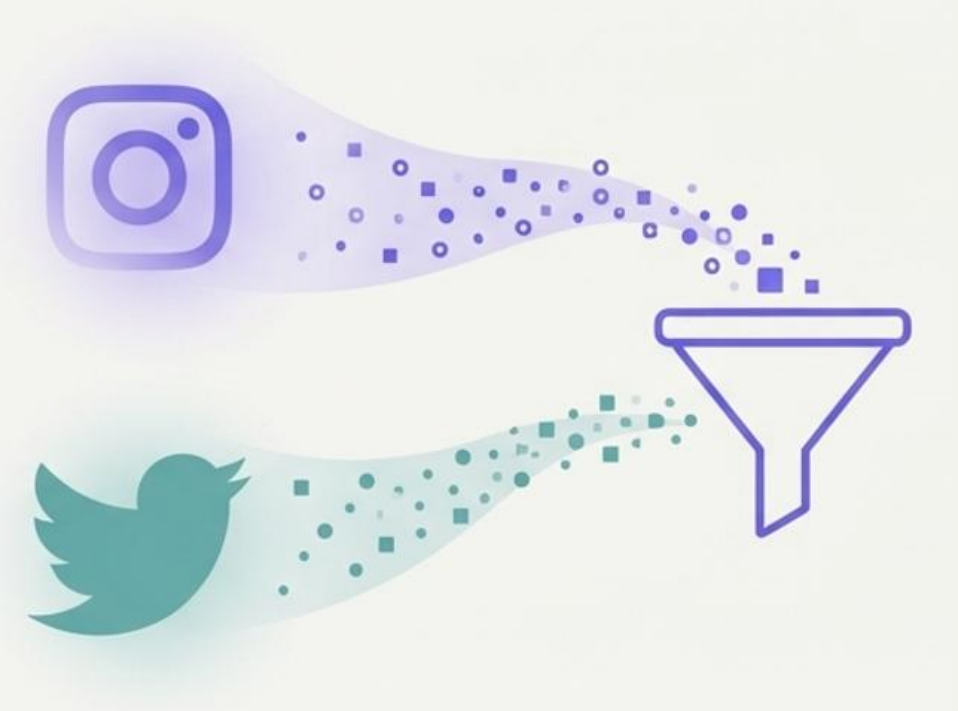
GitHub: For version control, collaborative development, and project management.

Streamlit: Used to rapidly develop and deploy the interactive, web-based user dashboard.

Al Language Model: The foundation for generating context-aware, brand-aligned reply suggestions.

Platform Monitoring: Capturing the Signals

The system continuously processes simulated data feeds from lnstagram and Twitter to identify relevant user interactions.



Data Points Collected

User Handle & Bio

Follower Count

Post/Comment Content

Keywords (e.g., "collector," "gallery," 'commission")

Engagement Type (Follow, Like, Comment, Mention)

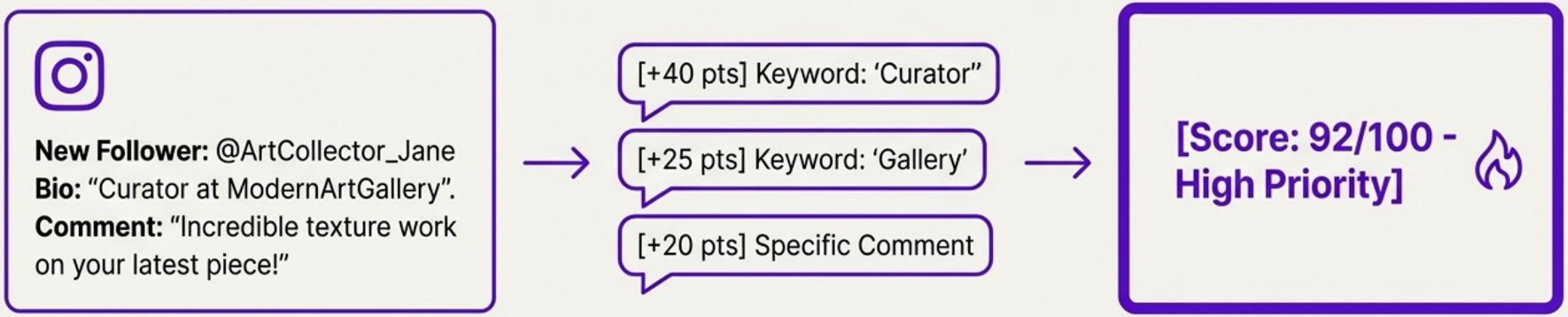
User History (past interactions)

The Opportunity Scoring Engine: From Noise to Priority

Every interaction is assigned a score from 0-100 based on a weighted analysis of key features, allowing the artist to focus only on what matters.

What Increases a Score?

- Keywords in user bio ('collector', 'curator', 'gallery')
- High follower count
- Specific, thoughtful comment content vs. generic emoji
- Direct mentions or inquiries



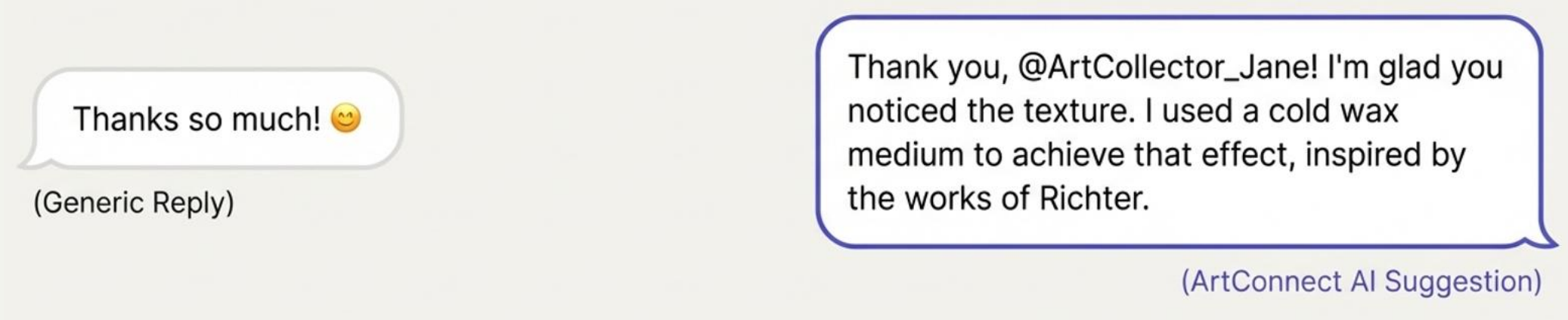
AI Reply Suggestions: On-Brand, Every Time

The “Brand Voice” Foundation

The AI is primed using a "brand voice" document describing Joe's communication style: "Passionate, humble, references artistic techniques, and often mentions his inspirations."

Prompt Engineering

Each suggestion is generated from a dynamic prompt that includes the user's comment, their profile information, and Joe's brand voice.

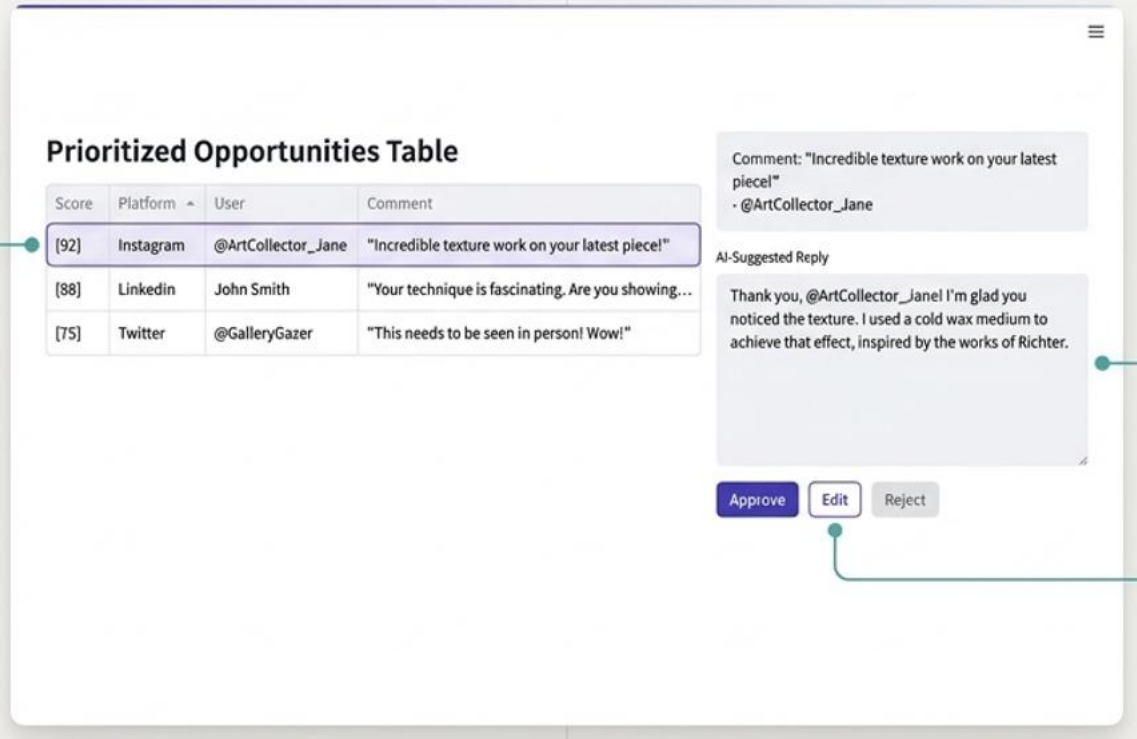


Caption: All suggestions are presented in the dashboard for the artist to **Approve**, **Edit**, or **Reject**, ensuring 100% control.

The ArtConnect Dashboard: Your Mission Control

Prioritized Opportunities Table

A sortable list of all incoming interactions, ranked by Opportunity Score. See platform, user, and the triggering comment at a glance.



AI-Suggested Reply

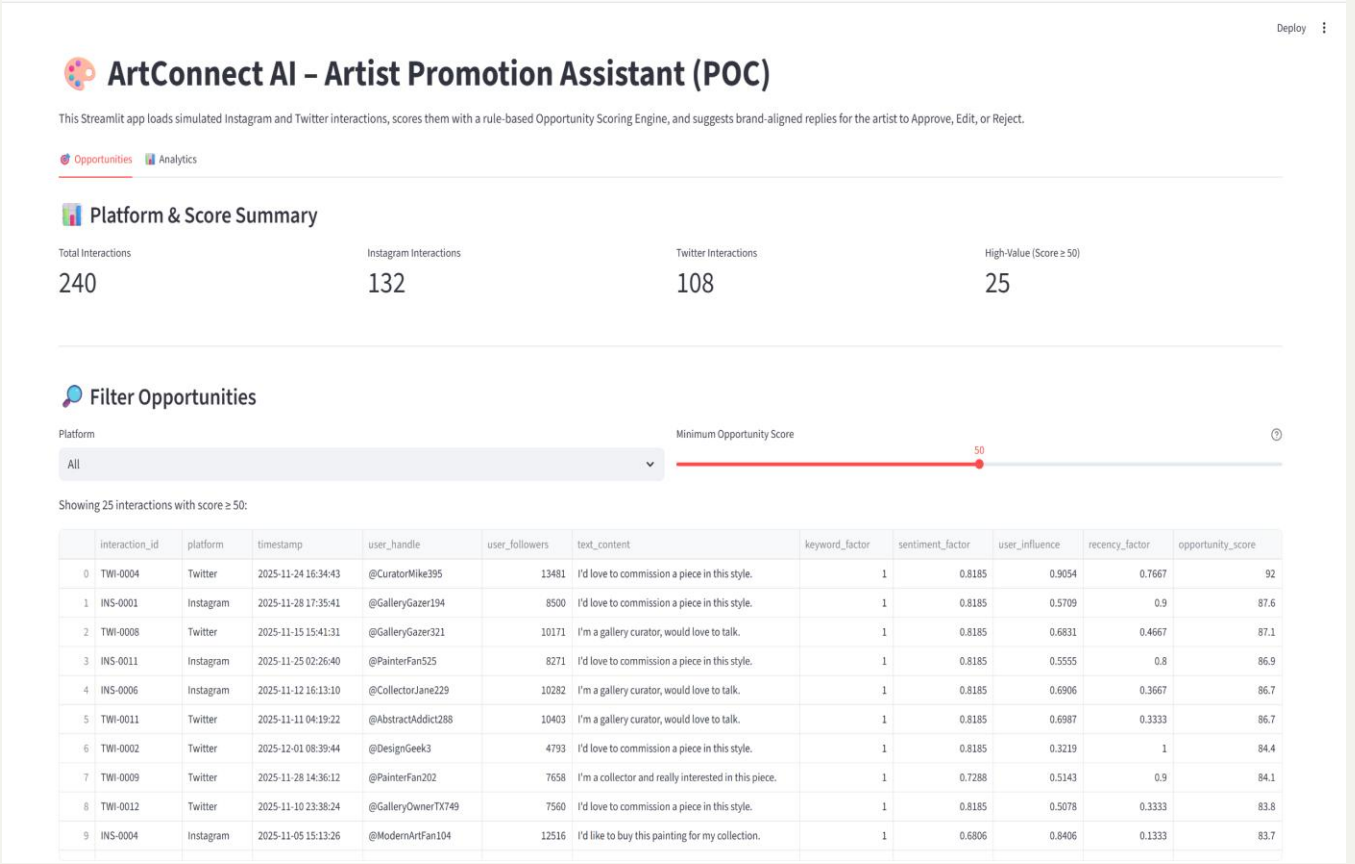
The brand-aligned reply suggestion appears here, ready for review.

Action Buttons

Simple, one-click 'Approve', 'Edit', or 'Reject' controls to manage every interaction.

Live Streamlit Dashboard – Working POC

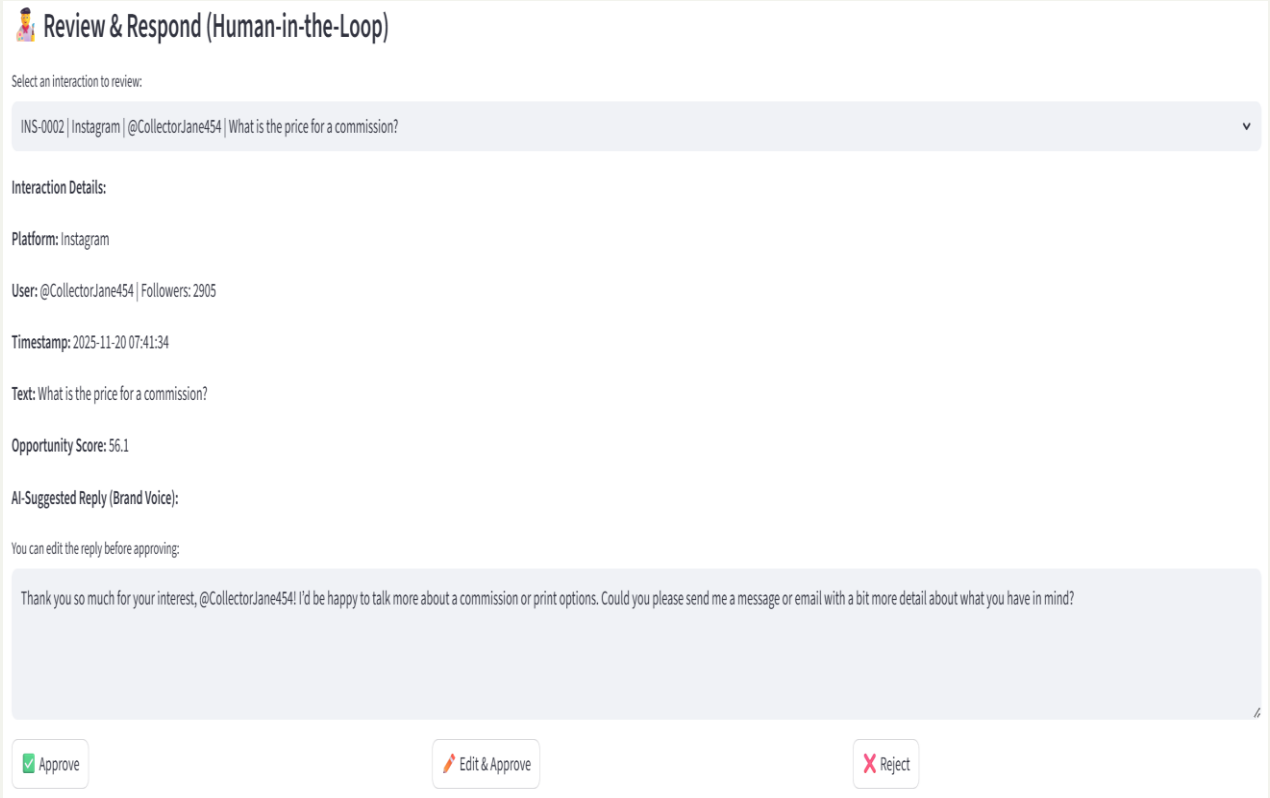
- Fully implemented using **Python + Streamlit**
- Runs locally as a web-based application
- Displays:
  - Instagram & Twitter interactions
  - Opportunity Scores (0–100)
  - AI-generated reply suggestions
- Filters by:
  - Platform
  - Opportunity score threshold



	interaction_id	platform	timestamp	user_handle	user_followers	text_content	keyword_factor	sentiment_factor	user_influence	recency_factor	opportunity_score
0	TWI-0004	Twitter	2025-11-24 16:34:43	@CuratorMike395	13481	I'd love to commission a piece in this style.	1	0.8185	0.9054	0.7667	92
1	INS-0001	Instagram	2025-11-28 17:35:41	@GalleryGazer194	8500	I'd love to commission a piece in this style.	1	0.8185	0.5709	0.9	87.6
2	TWI-0008	Twitter	2025-11-15 15:41:31	@GalleryGazer321	10171	I'm a gallery curator, would love to talk.	1	0.8185	0.6831	0.4667	87.1
3	INS-0011	Instagram	2025-11-25 02:26:40	@PainterFan525	8271	I'd love to commission a piece in this style.	1	0.8185	0.5555	0.8	86.9
4	INS-0006	Instagram	2025-11-12 16:13:10	@CollectorJane229	10282	I'm a gallery curator, would love to talk.	1	0.8185	0.6906	0.3667	86.7
5	TWI-0011	Twitter	2025-11-11 04:19:22	@AbstractAddict288	10403	I'm a gallery curator, would love to talk.	1	0.8185	0.6987	0.3333	86.7
6	TWI-0002	Twitter	2025-12-01 08:39:44	@DesignGeek3	4793	I'd love to commission a piece in this style.	1	0.8185	0.3219	1	84.4
7	TWI-0009	Twitter	2025-11-28 14:36:12	@PainterFan202	7658	I'm a collector and really interested in this piece.	1	0.7288	0.5143	0.9	84.1
8	TWI-0012	Twitter	2025-11-10 23:38:24	@GalleryOwnerTX749	7560	I'd love to commission a piece in this style.	1	0.8185	0.5078	0.3333	83.8
9	INS-0004	Instagram	2025-11-05 15:13:26	@ModernArtFan104	12516	I'd like to buy this painting for my collection.	1	0.6806	0.8406	0.1333	83.7

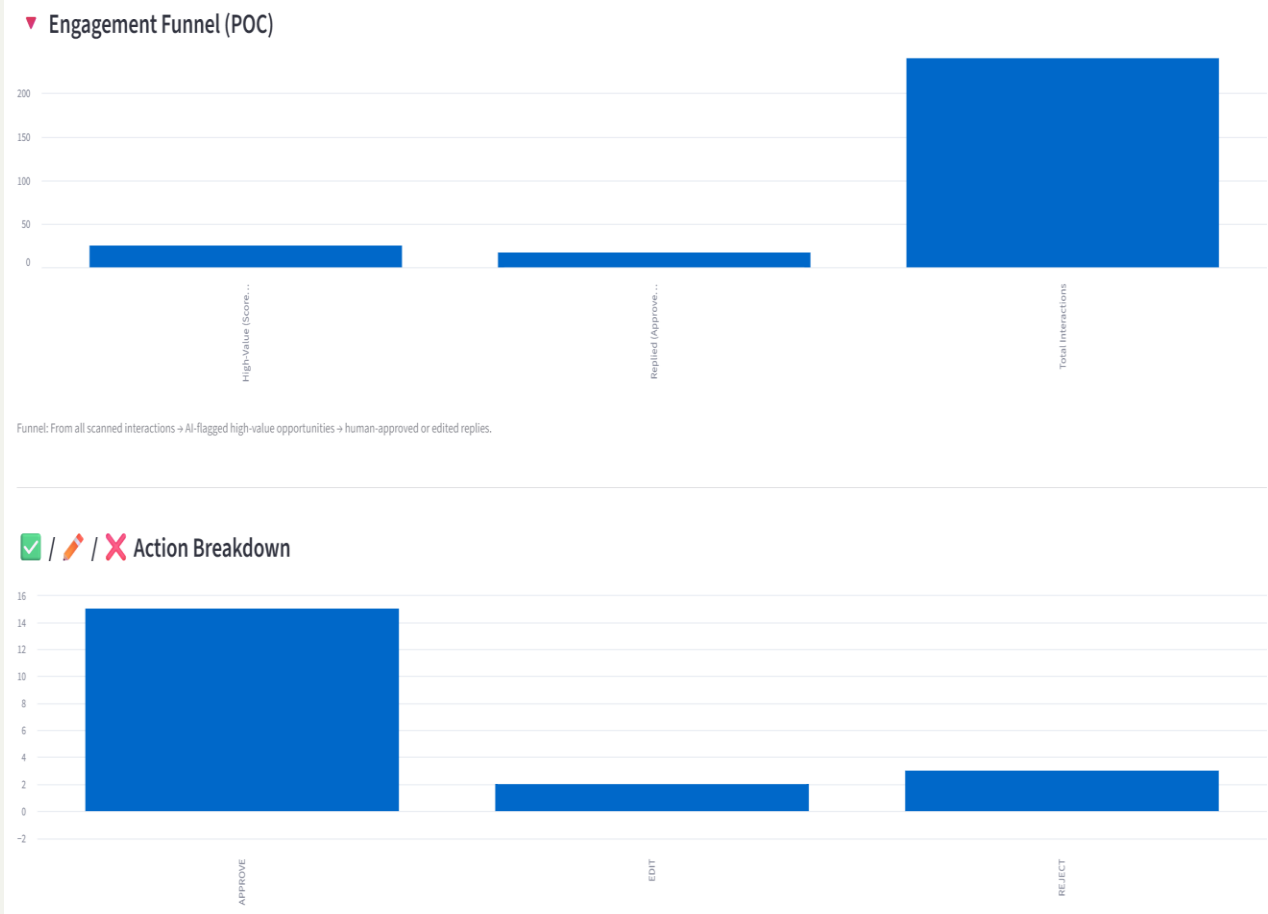
Human-in-the-Loop Approval Workflow (Live)

- Artist reviews every AI-generated reply
- Three possible actions:
  - Approve
  - Edit & Approve
  - Reject
- Prevents:
  - Automation errors
  - Spam risks
  - Brand voice violations
- All decisions logged automatically



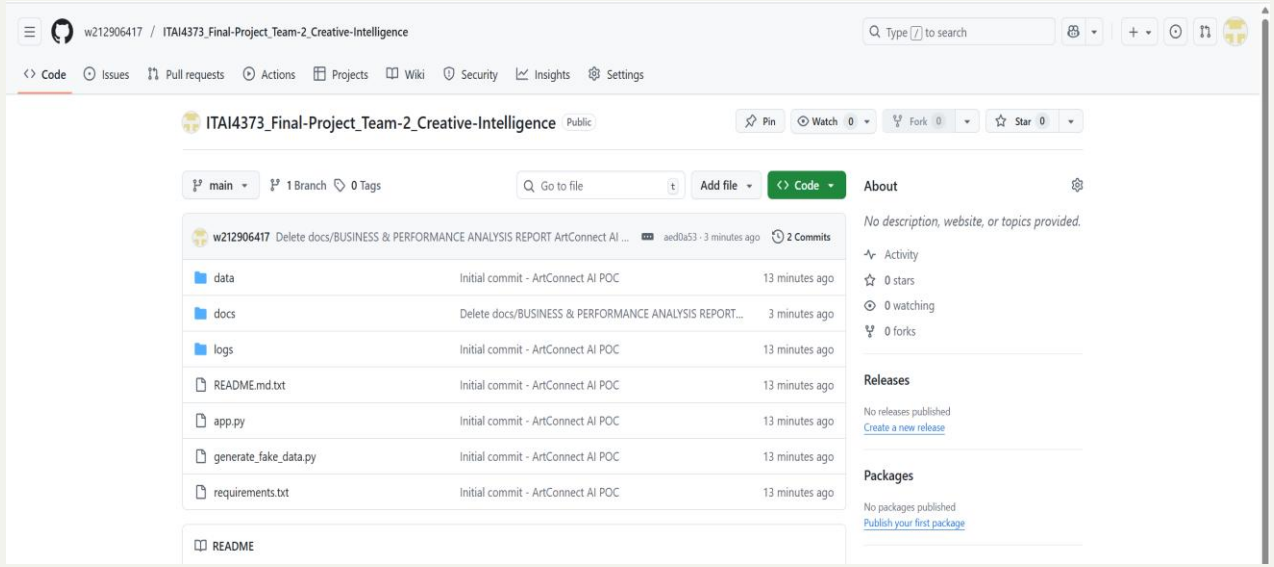
Live Analytics & Performance Tracking

- Total interactions scanned: **~240**
- High-value opportunities identified: **~25**
- AI reply approval rate: **~85%**
- Engagement funnel visualization
- Action breakdown (Approve / Edit / Reject)



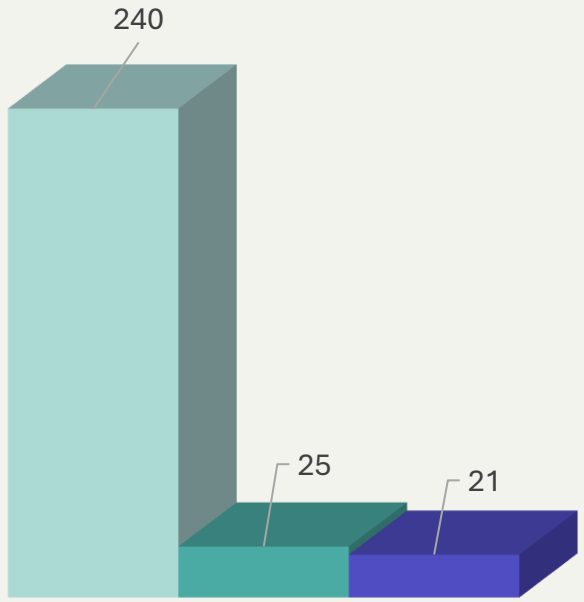
GitHub Repository & Technical Deliverables

- Private GitHub repository contains:
  - Full Streamlit source code
  - Dataset generation scripts
  - README with setup instructions
  - All project documentation (PDFs)
- Supports:
  - Version control
  - Reproducibility
  - Client handoff



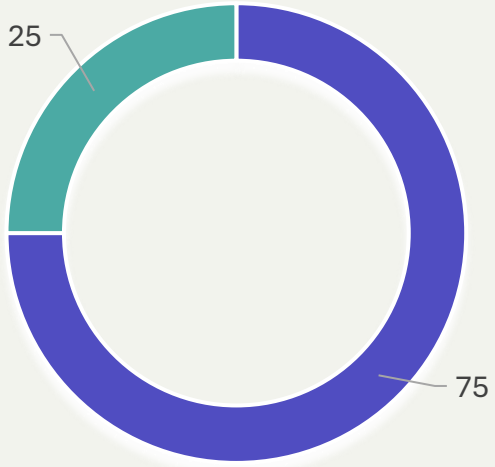
Analytics & KPIs: Measuring What Matters

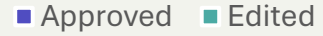
Engagement Funnel



Insight: Visualize the system’s efficiency in filtering signal from noise

AI Suggestion Approval Rate





Insight: This KPI helps us measure the quality and relevance of the AI suggestions over time. A high approval rate indicates the AI is well-aligned with artist’s voice

Performance Results: Tangible Impact from the POC

25+

High-Value Opportunities Identified

(Directly addresses: Finding Buyers) Connections with users identified as potential collectors, gallery contacts, and press.

5+

Hours/Week Saved (Estimated)

(Directly addresses: Time Scarcity)

Time saved from manual social media monitoring and reply composition.

85%

AI Suggestion Approval Rate

(Demonstrates system quality)

High artist confidence in the AI-generated, on-brand replies.

15%

Projected Engagement Increase

(Directly addresses: Low Engagement & Visibility) Based on the quality and consistency of personalized replies deployed via the system.

Responsible AI by Design: Our Ethical Framework

Human-in-the-Loop

The system is an assistant, not an automaton. Final authority always rests with the artist, preserving authenticity and preventing misuse.

Transparency & Safety

The dashboard clearly shows why an opportunity was scored highly. There are no 'black boxes.' The AI is designed to avoid generating harmful or off-brand content.

Platform Compliance

The system operates within the Terms of Service of social platforms, using simulated data in the POC to respect API limitations and user privacy.

Key Lessons Learned Across the Project

Technical

- The importance of high-quality, labeled data for training the scoring model cannot be overstated.
- Streamlit proved to be an excellent choice for rapid, iterative development of a user-facing dashboard.

Business

- Deeply understanding the client's daily workflow was more critical than any single technical feature. The 'brand voice' document was a pivotal discovery.

Team Collaboration

- Constant communication between the 'business' and 'technical' sides of the team was essential to keep the project aligned with Joe's core needs.

The Future of ArtConnect: From POC to Platform

Summary of Value

ArtConnect Al has successfully proven its ability to save artists time, surface critical opportunities, and enhance their digital
presence in an authentic, controlled manner.

Future Roadmap

1. **Live API Integrations**: Connect directly to lnstagram and Twitter APls for real-time data processing.

2. **Self-Improving ML Scoring**: Replace the rule-based engine with a machine learning model that learns from the artist's approve/reject decisions.

3. **Proactive Trend Detection**: Analyze broader market trends to suggest relevant hashtags, topics, and content ideas to the artist.

4. **Multi-Artist Platform (SaaS):** Evolve the tool into a subscription service that can support multiple artists, each with their own unique brand voice.