



Arts and Advanced Big Data

v1.0

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Review

➤ **Week 1 — Instructor & Course Introduction**

- Met the instructor and classmates
- Learned course goals and methods
- Key idea: Arts × Advanced × Big Data
- Tool for communication: Trello

➤ **Week 2 — Coding with Prompt: Introduction**

- First demo of a Generative Poster in Python
- Learned the workflow: Prompt → Code → Run → Refine
- Concepts: randomness, lists, loops, functions, matplotlib
- [Reference Code](#)

➤ **Week 3 — Coding with Prompt: Practice**

- Practiced changing parameters (layers, wobble, radius)
- Designed custom color palettes (pastel, vivid, mono)
- Added style presets (Minimal, Vivid, NoiseTouch)
- Learned reproducibility with seed + saving posters as PNG
- [Reference Code](#)

➤ **Week 4 — Coding with Prompt: Extensions**

- [Interactive & 3D-like posters](#)

- **Week 5 — Data-Driven Generative Poster (CSV)**
 - Data is everywhere. AI is also everywhere.
 - Data exists in many forms
 - Structured Data
 - Semi-Structured Data
 - Unstructured Data
 - Data is not only information – it's material for creativity.
 - Main Activity
 - Create a generative poster whose colors come from a CSV palette.
 - [Reference Code](#)
- **Week 6 – Happy Chuseok (No Class)**

➤ **Week 7 — MCP (Model Context Protocol)**

- MCP Basic Concepts & Architecture
 - MCP Client
 - MCP Server
- Claude Desktop Installation
- MCP Local Filesystem Setup & Test

➤ **Week 8 – Mid-Term All-in-One (No Class)**

➤ **Week 9 – Web-based**

- Modern Software Development Style
 - LLM ↔ Colab ↔ Github ↔ Streamlit

➤ Week 10 — Open API

- Open API Concepts & Architecture
 - Web Client
 - Web Server
- Sample Sites using Open API
 - Explore Artworks with MET Museum API
 - <https://artwork-rdy2gcm6lksscmcdcscxdj.streamlit.app/>
 - Open-Meteo Interactive Weather Dashboard
 - <https://weather-wkphpaukijoaqqbrtdyvtu.streamlit.app/>
 - Kospi200 Recommendation Service
 - <https://kospi200.streamlit.app/>






Role-based Chatbot

➤ **Role-based Chatbot**

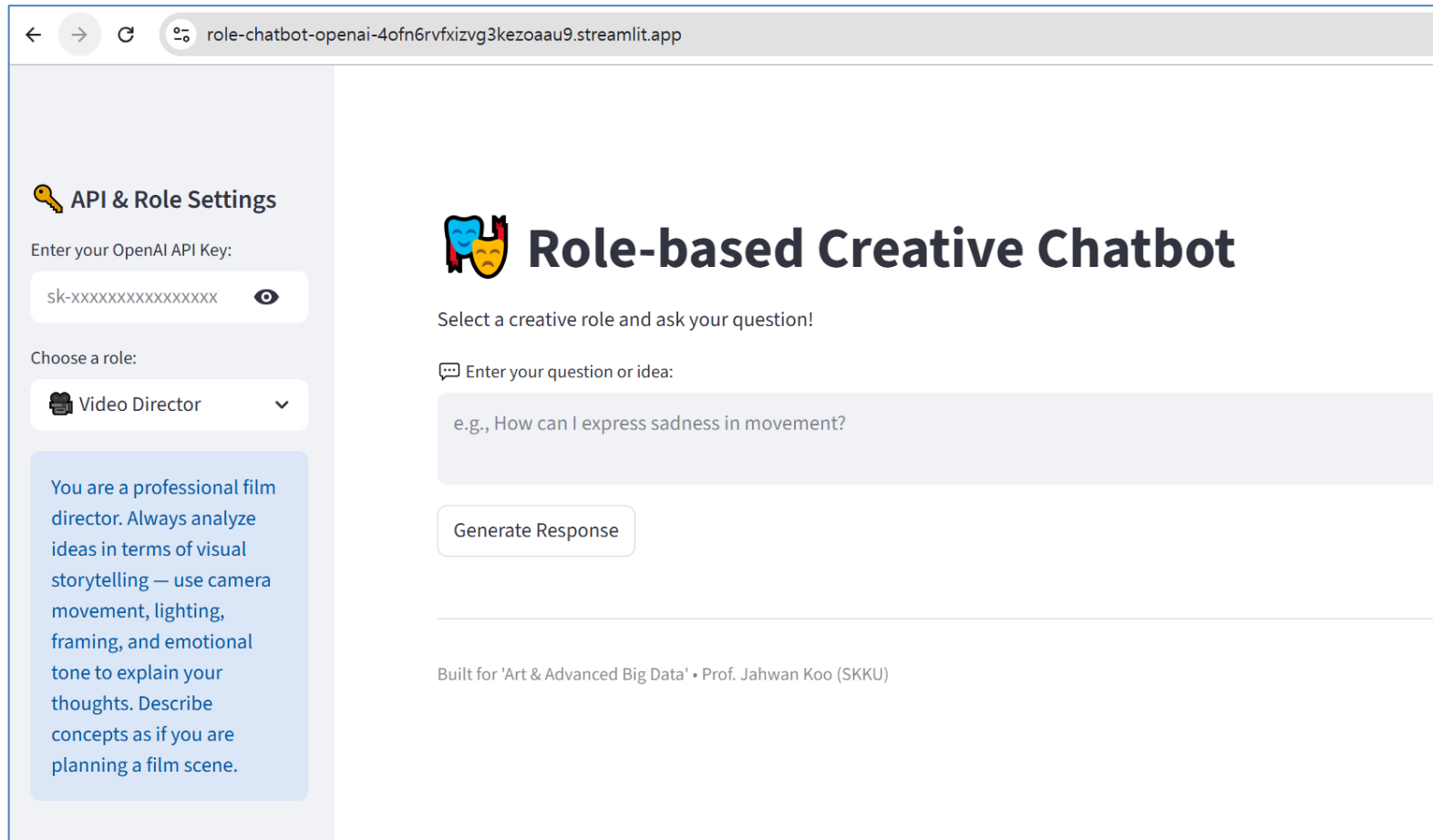
- AI models can answer general questions.
- If we give them **a role**, they become more creative and useful. For example, a chatbot can act as:
 - a video production expert
 - a fashion consultant
 - a dance coach
 - a performing arts critic.
- You'll design your own chatbot that 'thinks and speaks' like a professional in one creative field.

➤ Goal

- Implement a **role-based chatbot** using Claude or OpenAI API.

Role	Description	Example Question
 Video Director	Analyzes mood, camera angle, lighting	"How can I shoot a dream sequence?"
 Dance Instructor	Suggests movement, rhythm, expression	"How can I express sadness through movement?"
 Fashion Stylist	Explains color trends, materials, silhouette	"What style fits a confident personality?"
 Acting Coach	Teaches emotion delivery, scene breakdown	"How to express fear naturally on stage?"
 Art Curator	Interprets artwork, connects with data	"How does this composition convey emotion?"

➤ <https://role-chatbot-openai-4ofn6rvfxizvg3kezoaau9.streamlit.app/>



The screenshot shows a web browser window with the URL `role-chatbot-openai-4ofn6rvfxizvg3kezoaau9.streamlit.app`. The interface is divided into two main sections. On the left, there is a sidebar with the title "API & Role Settings". It contains a text input field for the OpenAI API key (masked with "sk-xxxxxxxxxxxxxxxx"), a dropdown menu for selecting a role (currently set to "Video Director"), and a blue box with a system prompt: "You are a professional film director. Always analyze ideas in terms of visual storytelling — use camera movement, lighting, framing, and emotional tone to explain your thoughts. Describe concepts as if you are planning a film scene." The main area on the right features a title "Role-based Creative Chatbot" with a mask icon, a prompt "Select a creative role and ask your question!", a text input field for the user's question (with an example: "e.g., How can I express sadness in movement?"), and a "Generate Response" button. At the bottom of the main area, it says "Built for 'Art & Advanced Big Data' • Prof. Jahwan Koo (SKKU)".