### Scaling Government Innovation Through Prompt Engineering

State of New Jersey | Office of Innovation

**Jia Qi**, Product Management Fellow | New York University, Data Science and Computer Science

#### **Keywords:**

prompt engineering, user research, generative ai

#### **Summary:**

The NJ Al Assistant Prompt Library is crafted to enhance Al interactions for state employees by offering a repository of ready-to-use, high-quality prompts. This library aims to save time, provide consistency, and assist users, especially those less experienced, in crafting prompts that yield optimal Al responses.

coding it forward > 2025 FELLOWSHIP

# Scaling Government Innovation with Prompt Engineering

**Platform Team** 

State of New Jersey – Office of Innovation

Ruthie Nachmany — Product Manager



## **OVERVIEW**



## **OVERVIEW**

- New Jersey named one of three states with "Advanced" AI readiness by Code for America
  - First state to adopt AI use policy and launch an AI Assistant
- NJ AI Assistant
  - a tool that helps state employees enhance their work efficiency and improve government services through AI technology
  - LLMs and Generative AI





How might we **maximize** the utility of the NJ AI Assistant?

### PROMPT TEMPLATE LIBRARY

- A prompt template library is a collection of pre-written prompts that help users interact more effectively with AI tools by providing structured, reusable starting points
- Bracketed words [] are suggestions to customize as needed
- Prompts include suggestions for enhancing effectiveness





### PROMPT TEMPLATE LIBRARY

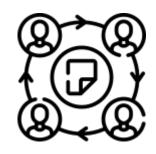
- Why is this important?
  - Help people finish their tasks faster
  - Discovering other capabilities of the AI Assistant
  - Improves quality of AI responses
  - Helping people feel more confident in their work



## **COMPONENTS**



Prompts



Contribution models



Integration to the NJ
Al Assistant



### PROMPT ENGINEERING

- Inspiration from pre-existing prompt libraries
- Read lots of documentation and papers
- A/B testing
  - NJ Al Assistant does not have history

### **Prompt Table of Contents:**

### **General Use Prompts:**

**Brainstorming** 

Summary Memo Drafting and Creation

Formal Proofreading Rewording/Grammar check

Simple Rewording/Grammar Check

Synthesize or summarize information

#### Coding

**Performance Optimization** 

**Code Generation** 



### PROMPT ENGINEERING

### The Six Prompt Components

- Task
  - "Summarize the article"
- Context
  - "Create a workout plan for a busy individual"
- Exemplar
  - "Use STAR framework in interview response"

- Persona
  - "Act like a hiring manager"
- Format
  - "Deliver in bullet points"
- Tone
  - "Use formal tone"



## **MVP v1.0**

Minimum Viable Product



### PROMPT EXAMPLE

### **Prompt:**

You are an expert in English language arts with advanced skills in proofreading, editing, spelling, grammar, and punctuation. Your task is to carefully review the provided [insert type of document] to identify any errors, inconsistencies, or areas needing clarity. Correct these discrepancies to enhance readability, professionalism, and cohesiveness, ensuring the intended meaning is accurately conveyed. Output only the corrected version in a professional tone.

[insert document, paragraph, etc.]

- Task
- Context
- Exemplar
- Persona
- Format
- Tone



#### Example:

You are an expert in English language arts with advanced skills in proofreading, editing, spelling, grammar, and punctuation. Your task is to carefully review the provided paragraph to identify any errors, inconsistencies, or areas needing clarity....

For Q3, the redesign of the new employee onboarding experience was proposed with the intention of reducing time-to-productivity and increase the first 90 day engagement of the new hire. We've conducted feedback from exit interviews and internal surveys showed confusion and inconsistency in onboarding across teams. We also found that existing onboarding materials were outdated and lacked centralized access. This change would apply to all full-time hires across all teams. As onboarding materials are outdated, we would have to resign these documents, which include guides, checklists, videos, etc. A centralized onboarding portal would also be very helpful, using a combination of Notion and HRIS integration. It would be good to standardized 30/60/90 day plans across most teams. This project will take approximately two months, starting from early July to late August.

#### **Generated Result:**

For Q3, the redesign of the new employee onboarding experience was proposed with the intention of reducing time-to-productivity and increasing first 90-day engagement for new hires. Feedback from exit interviews and internal surveys showed confusion and inconsistency in onboarding across teams. We also found that existing onboarding materials were outdated and lacked centralized access. This change will apply to all full-time hires across all teams. As the onboarding materials are outdated, we will need to redesign these documents, which include guides, checklists, videos, etc. A centralized onboarding portal would also be very helpful, utilizing a combination of Notion and HRIS integration. It would be beneficial to standardize 30/60/90-day plans across most teams. This project will take approximately two months, starting from early July to late August.



What strategies can we implement to ensure the prompt template library remains relevant and consistently updated?



## **CONTRIBUTION MODEL**

Definition: a defined set of guidelines and processes that allow contributors (typically from outside the core design system team) to add to the system

- Types of Contribution Model
  - Open Contribution
  - Hybrid Model
  - Moderated Contribution





## CONTRIBUTION MODEL

### Moderated Contribution Model:

- Pros: higher quality and constantly improving prompts
- Cons: More "man" power; slower updates
- Prompt Contribution
- Feedback
  - Defining metrics for user feedback that can be used for future improvements







This is an internal generative artificial intelligence chatbot for use by NJ state employees and authorized parties, using the GPT-40 model.

Training Requirements: Before using the NJ Al Assistant, please begin the Responsible Al for Public Professionals training course. Access this course as a State Learner or as an External Learner. If you have trouble accessing the course, please email <a href="mailto:clipelearning.support@csc.nj.gov">clipelearning.support@csc.nj.gov</a>.

**Sensitive Information:** In order to ensure responsible, safe AI use, please follow these <u>guidelines</u>.

Newsletter: Sign up for the Al assistant newsletter to stay informed about upcoming and new features.

**Prompt Library:** Having trouble writing your own prompts? Access the Al assistant's prompt library for ideas and drafting.



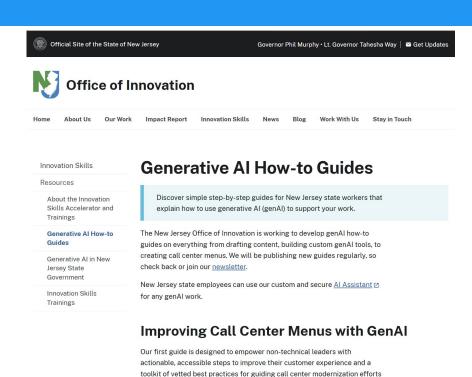
Did you find what you were looking for on this page?

Yes

No

## **IMPLEMENTATION**

Implementing the first MVP on the innovation.nj.gov website



using Interactive Voice Response (IVR) software. With these resources, you will learn how genAl can simplify the process of drafting menus to refining

self-service options and routing calls effectively.



## WRAPPING UP...



## IN THE PAST 10 WEEKS...

#### I was able to:

- Better understand personal strengths and how they fit with a product role
- Meet new people and build relationships
- Develop tangible projects that were able to make an impact:
  - Feedback Backlog
  - Metrics Recommendations and Research
  - Facilitating brainstorms and retrospectives





## Thank you!

### Acknowledgments:

- My Supervisor, Ruthie
- State of NJ, Office of Innovation
- Cassie and Yuyang

