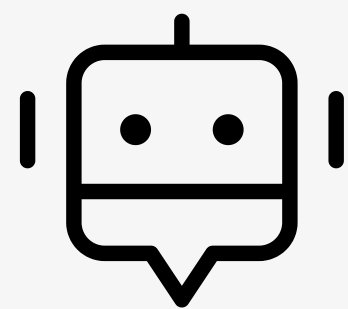# OMNI BOT

By: Ayman Shafi, Gaurav Bhagchandani, Naina Thapar, Raghu Kapur, Shubham Bhatia

Empowering Chatbots with Custom Problem-Solving:
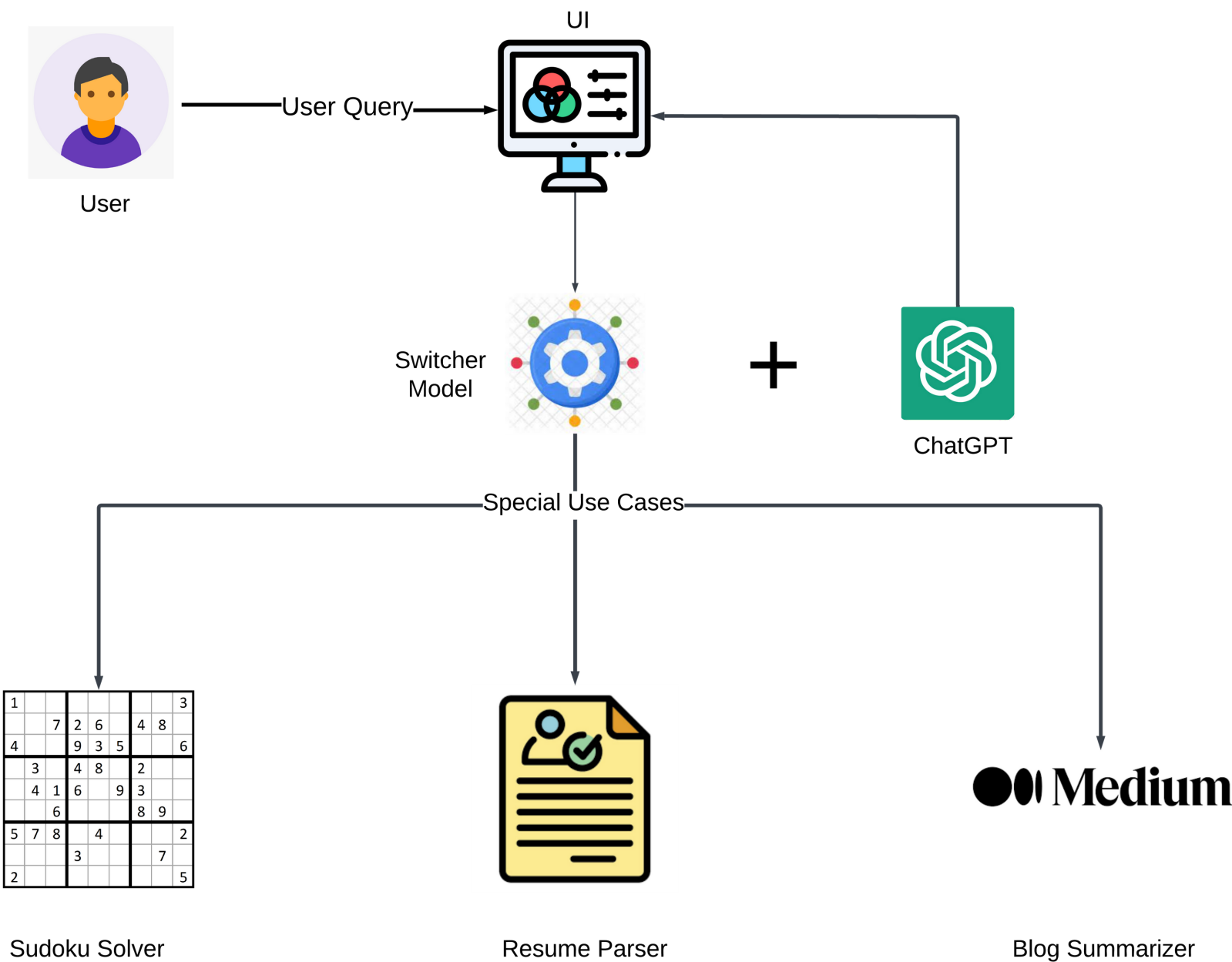The Game-Changing Omni Bot Plugin System

MOTIVATION

To enhance the usability of NLP-based AI chatbots by enabling a plug-and-play mechanism to add user-defined models for custom problems

METHODOLOGY

- A variety of ML models are integrated within the bot
- An internal 'switcher' model in the architecture helps categorise the prompts for Omni Bot
- Stages involved: Data synthesis, integration, analysis, product development, testing and evaluation

UI

User Query — User

Switcher Model + ChatGPT

Special Use Cases

Sudoku Solver   Resume Parser   Blog Summarizer — Medium

LEARNING

- Developed a deep understanding of NLP techniques and their applications in building conversational AI systems
- Gained hands-on experience with ML frameworks and tools, including data synthesis, processing and integration

RESULT

Built a robust and versatile natural language AI chatbot with a plug-and-play architecture, capable of handling a wide range of use-cases

FUTURE ENHANCEMENTS

- Model Improvement: Ask users for feedback via the chatbot and use it to improve its responses and knowledge base
- Usability improvement: Make integrations simpler for future models via APIs/GUI