◉ Search By Ingredients Challenge

Argmax

📅 Submission Deadline: June 30th, 2025

🎥 Please watch this explainer video to understand the task.

✋ Who Is This Repo For?

Argmax is hiring Junior Data scientists in Israel (TLV) and the United States (NYC area). This repo is meant to be a the first step in the process and it will set the stage for the interview.

The data is taken from a real-life scenario, and it reflects the type of work you will do at Argmax.

💼 About the Position

Argmax is a boutique consulting firm specializing in personalized search and recommendation systems. We work with medium to large-scale clients across retail, advertising, healthcare, and finance.

We use tools like large language models, vector databases, and behavioral data to build personalization systems that actually deliver results.

We're looking for candidates who are:

- ☑ Proficient in Python
- 🔍 Naturally curious
- 🧠 Able to perform independent research

This challenge is designed to simulate the type of problems you'll tackle with us, and it applies to positions in both our:

- 🇮🇱 Ramat Gan, Israel office
- 🇺🇸 North Bergen County, New Jersey office

🎥 Past Project Talks

1. Uri's talk on Persona based evaluation with large language models
2. Benjamin Kempinski on offline metrics
3. Daniel Hen & Uri Goren on pricing with contextual bandits
4. Eitan Zimmerman's talk on visual feed reranking

🚀 Getting Started

⚒ Setup

1. Make sure Docker is installed on your machine.
2. Run the following in your terminal: `docker compose build` and `docker compose up -d`
3. Open your browser and go to localhost:8888
4. Follow the instructions in the task.ipynb notebook

📑 Submission Instructions

1. **Clone** this repository into a **private GitHub repo** under your own account.
2. **Invite** argmax2025 as a collaborator.
3. **Implement** the missing parts in the codebase.
4. Once done, fill in the application form: 1.1. US Application Form 1.1 IL Application Form
5. We'll reach out to you after reviewing your submission.

🔬 The Interview Process

👨‍💻 Hands-On Technical Interview (July 2025)

1. A 3-hour live coding session focused on your submitted solution.
2. You'll be asked to extend, modify, and explain parts of the codebase.
3. Please ensure you're in a quiet space with a workstation capable of running your solution.

🏢 On-Site Interview (August-September 2025)

1. A non-technical, in-person meeting at our offices in Ramat Gan or New Jersey.
2. We'll get to know you and discuss your goals.
3. Successful candidates will receive offers around late August or early September.

❓ Still Have Questions?

Feel free to mail us at challenge25@argmaxml.com