

AI IGNITE WEEK

Technical Track

TASK 1: SMART TO-DO LIST PRIORITY PREDICTOR

Problem Statement:

Build an AI that learns from your completed tasks and predicts which new tasks you should do first based on your personal productivity patterns.

What You'll Build:

A simple system that:

- Tracks when you complete different types of tasks
- Learns your productivity patterns (morning person? deadline-driven?)
- Automatically prioritizes new tasks based on your habits

Simple Approach:

- # just need basic libraries
- `pip install pandas scikit-learn matplotlib`

Steps:

1. **Create sample data:** Generate 50-100 sample tasks (smaller dataset, easier to understand) with features like:
 - Task type (email, coding, meeting, personal)
 - Time of day added (morning, afternoon, evening)
 - Deadline urgency (high, medium, low)
 - Completion order (which you did first, second, third...)
2. **Build simple rules first:** Before using ML, create basic rules:
 - If task = urgent AND time = morning → priority = HIGH
 - If task = email AND time = afternoon → priority = MEDIUM

3. **Optional: Simple model:** Use basic classification to predict "high/medium/low" priority with Decision Tree (easiest to understand)
4. **Test:** Add 5-10 new tasks and see the priority predictions

Sample Data:

New Task Analysis:

- Task: "Reply to client email"
- Predicted Priority: HIGH (85% confidence)
- Reason: You usually do emails in morning, this is urgent
- Task: "Code review"
- Predicted Priority: MEDIUM (72% confidence)
- Reason: Similar to tasks you do in afternoon

Additional Resource:

<https://youtu.be/mvveVcbHynE?si=VysHuv695ID2gIZN>