

Input: Physiological data from Smartwatch

Output: Personalized stress management response from EmLLM chatbot

Initialize: Load stress detection model and customized Falcon-7B model **Loop:** For each day

Acquire HR, EDA, and ST signals;

Classify stress vs. non-stress;

if *stress detected* **then**

Set *stress_label* \leftarrow 1;

end

else

Set *stress_label* \leftarrow 0;

end

if *end-of-day* **then**

if *stress_label* == 1 **then**

Prompt user via web interface for input;

Display chatbot response to user;

end

else

Notify user: "No stress detected. You had a calm day.";

end

End

Algorithm 1: Daily stress monitoring and intervention using physiology-driven EmLLM chatbot.