Skincaire: an AI-Powered Skin Outbreak Tracker

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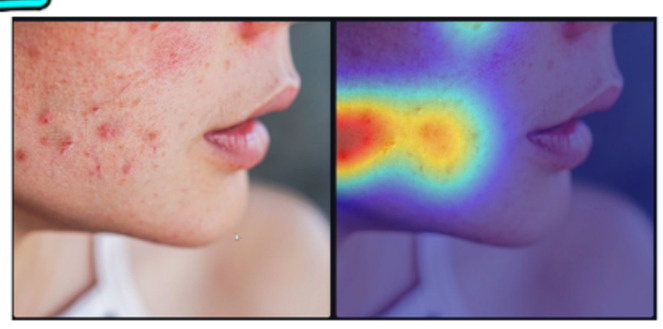
Technolgies

YOLO

Severity Detection
Score, heatmap, detection



pandas SciPy SQLite

Analyzing ill Severity
Trends and Correlations with Lifestyle and Environmental Factors

personalized skincare plan
Recommendations based on user profile and timeseries

FastAPI Streamlit

Frontend/Backend

Pipeline

- **detection**: yolov8s trainned on skin-issue-detection-g5uov Dataset, score and Heatmap inspired from Acne Ai Paper

$$S = \frac{200}{\pi} arctan\left(20 \sum_{i=1}^{N} s_i \frac{a_i}{A}\right)$$

- **Analyzing ill Severity:** using stored record from DB and statistical correlation
- **Recommend:** MedLlama2 7B with 4-bit quantization

Positive Outcomes

- The application runs smoothly and tracks skin outbreaks effectively
- The heatmap provides a clear view of skin severity.
- The severity score is used to recommend treatments based on MedLlama

limitations

- The dataset used was limited and not ideal for training.
- No segmentation model was used; only bounding boxes were applied to estimate severity, reducing accuracy.
- Fitness watch data was not included for matching lifestyle patterns.
- The popular ACNE4 dataset was not available for training.

Time Spent