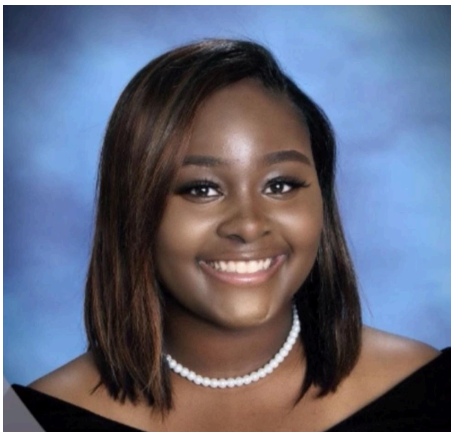
AC-3 — Aura Skin AI

AI 7993 - Section W01 - Fall 2025

September 7, 2025



Nyah Robinson

Project Team

Name	Major Role & Responsibilities	Contact
Nyah Robinson	• Define system requirements, collect resources, and review work. • Collect and preprocess image data for model training and testing. • Train ML models for skincare analysis. • Build a database for product and routine recommendations. • Develop the front-end (UI) and integrate with the model. • Test app functionality and accuracy of model predictions. • Prepare weekly reports, milestone updates, and final project documentation.	School Email 404.664.6296
Arthur Choi	Facilitate project progress; advise on project planning and management.	achoi13@kennesaw.edu

Overview

Aura Skin AI aims to design and develop a vision-based mobile app that analyzes a user's skin condition through images captured by their camera. The system will recognize common skincare concerns such as acne, dryness, or hyperpigmentation, and provide personalized product or routine recommendations based on the analysis.

The purpose of the project is to create a user-friendly, accessible tool that empowers individuals to make informed decisions about their skincare and overall wellness.

Major Components

Skin Problem Recognition

- Collect or use sample datasets of facial images.
- Preprocess images and train computer vision models.
- Classify skin concerns (acne, dryness, oiliness, dark spots, etc.).

Recommendation System

- Map skin concerns to suggested skincare practices and products.
- Build a small database of skincare recommendations.
- Ensure outputs are user-friendly and easy to understand.

Mobile App Development

- Build a cross-platform app using Flutter.
- Integrate the vision model and recommendation engine into the app.
- Develop a clean and interactive user interface.

Project Website

https://sites.google.com/view/auraskinai/home

Milestones and Deliverables

Overall Deliverables

- Functional mobile app that analyzes skin images and provides recommendations.
- Trained computer vision model for skin problem recognition.
- Recommendation system with product/routine suggestions.
- Project reports
- Formal presentation and demonstration.
- Gantt chart and weekly progress reports.

Milestones

By 9.7.2025

- Project plan requirements finalized.
- Initial research and dataset selection.

By 9.21.2025

- Data preprocessing and initial model prototyping.
- Model training, testing, and refinement.

By 10.19.2015

- Develop recommendation systems and product mapping.
- Begin mobile app development and integrate models.

By 11.30.2025

- Test the full system and fix issues along with refining the UI if there are problems.
- Finalize app, documentation, and presentation.

Communication and Meeting Plan

- **Progress Meetings:** Conducted bi-weekly on Tuesdays via MS Teams with advisor for status updates and feedback.
- **Weekly Reports:** Written activity reports submitted each week summarizing completed tasks, challenges, and next steps.
- **Communication:** Email or MS Teams group channel for feedback questions outside scheduled meetings.

Project Scheduling and Task Planning

PROJECT TITLE	AURA SKIN AI	PROJECT NUMBER	AC-3 VISION-BASED MOBILE APP
PROJECT MANAGER	NYAH ROBINSON	REPORT DATE	September 7, 2025

NUMBER	TASK TITLE	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE
1	**Project Planning & Research**				
1.1	Project Planning & Research	8/18/25	8/31/25	13	100%
1.2	Project Selection	8/25/25	8/31/25	6	100%
1.3	Research	8/22/25	9/7/25	15	100%
1.4	Project Plan	9/1/25	9/7/25	6	100%
1.5	WAR 1	9/8/25	9/12/25	4	0%
1.6	Dataset Collection	9/8/25	9/21/25	13	5%
1.7	Image preprocessing	9/8/25	9/21/25	13	5%
1.8	WAR 2	9/15/25	9/19/25	4	0%
2	**Model Development**				
2.1	Model Prototyping	9/15/25	9/28/25	13	0%
2.2	WAR 3	9/22/25	9/26/25	4	0%
2.3	Train Computer Model	9/15/25	10/5/25	20	0%
2.4	WAR 4	9/29/25	10/3/25	4	0%
3	**Recommendation System Development**				
3.1	WAR 5	10/6/25	10/10/25	4	0%
3.2	Build Recommendation Database	10/6/25	10/12/25	6	0%
3.3	Design Mapping of Skin Problems	10/6/25	10/19/25	13	0%
3.4	WAR 6	10/13/25	10/17/25	4	0%
4	**Mobile App Development**				
4.1	UI/UX Design	9/29/25	10/12/25	13	0%
4.2	ML Model Integration App	10/13/25	10/26/25	13	0%
4.3	WAR 7	10/27/25	10/31/25	4	
5	**Testing & Refinement**				
5.1	End-to-End Testing	10/27/25	11/9/25	12	0%
5.2	WAR 8	11/3/25	11/7/25	4	0%
5.3	Test and Feedback	11/3/25	11/9/25	6	0%
5.4	WAR 9	11/10/25	11/14/25	4	0%
6	**Finalization**				
6.1	Final Report Drafting	11/10/25	11/28/25	13	0%
6.2	WAR 10	11/17/25	11/21/25	4	0%
6.3	Demo and Slide Presentation	11/17/25	11/30/25	13	0%
6.4	Final Report and Submission	12/1/25	12/7/25	6	0%