

Solution Architecture

Date	15 February 2025	Team ID: LTVIP2025TMID36593	
Project Name	HematoVision: Advanced Blood Cell Classification Using Transfer Learning		Maximum Marks: 4 Marks

Solution Architecture

Solution architecture is the process of designing, describing, and managing the solution engineering in relation to specific business problems. It bridges the gap between complex business needs and available technological solutions.

Key goals of solution architecture:

- Identify the most suitable AI-based approach to automate blood cell classification.
- Design an efficient structure to integrate image preprocessing, model inference, and UI interaction.
- Define components like model loading, image handling, and web deployment.
- Clearly lay out the data flow from image upload to prediction display for healthcare professionals.

Example - Solution Architecture Diagram:

Figure: Architecture and data flow of the HematoVision application

