

AI PatternMaker — Project Documentation

1. Project Title:

AI PatternMaker™ — Sewing Patterns from Photos Using AI

2. Founder & Owner:

Nour — Computer Science student specialized in Biomedical Informatics

GitHub: [@nourbit-code](#)

3. Problem Statement:

People who want to sew or manufacture clothes often struggle to recreate a pattern from a photo.





Fashion designers waste time manually drafting patterns and adjusting for different sizes.

4. Solution:

AI PatternMaker allows users to upload a photo of a blouse, shirt, or dress, and automatically generates:

- Sewing patterns ready for printing
 - Multiple size options based on size charts
 - Fabric layout guidance
 - 3D previews of the design
 - Optional: Try-on using body measurements or photo
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5. Features Overview:

-  AI-powered pattern generation from images
-  Custom or international size chart support
-  Fabric cut direction & layout planning
-  3D virtual preview of design

- 📷 Try-on simulator using user's photo or measurements
 - 📄 Exports in formats ready for sewing & cutting machines
 - 🧠 AI feedback on symmetry, fabric tension, cut logic, etc.
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6. Tech Stack (Planned):

- Python, TensorFlow or PyTorch (AI)
 - OpenCV (image processing)
 - Blender or Three.js (3D simulation)
 - Jupyter Notebooks (training experiments)
 - GitHub (version control)
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7. Future Integrations:

- 🧵 Smart sewing machine & cutting machine compatibility
 - 🧬 AI that suggests better designs, fits, or style adjustments
 - 👥 AI assistant for beginners learning pattern making
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8. Legal Notes:

- This idea was founded by Nour
- All rights reserved to the original founder
- Project is being built under the MIT License
- Open for collaboration, funding, or support with proper credit