



Weaver, Ramesh Kumar Patel, CFC Lohta, Varanasi



Designer  
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Varanasi

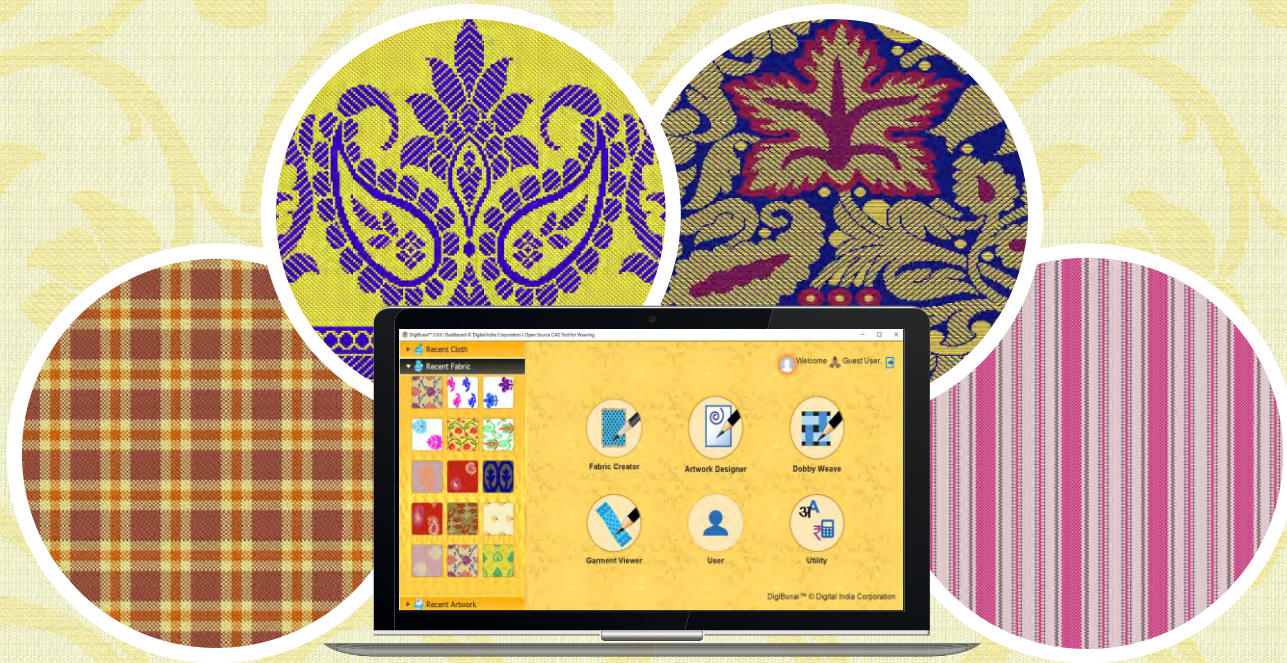
## DigiBunai™ CATD

**An Open Source CAD Software for Textile Designing**



**Digital India Corporation** (Formerly Media Lab Asia)



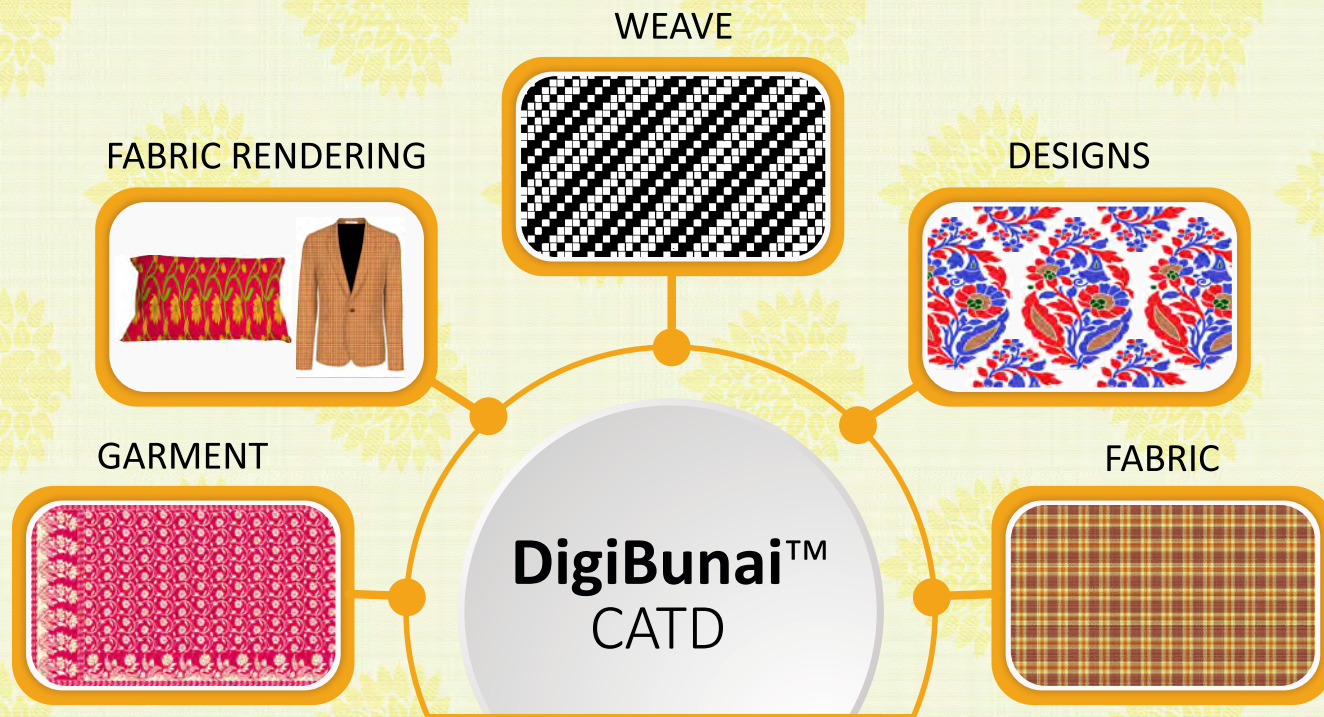


*An open source CAD Tool to optimize the pre-loom process of design creation, generation of graph, and punching the jacquard cards for the weaving with the ability to view the complete garment digitally with various colour combination and sizes before weaving.*

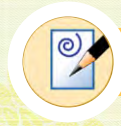




## *Functional Support*

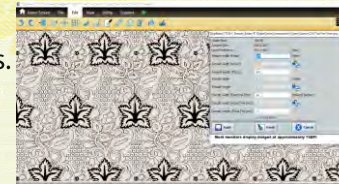




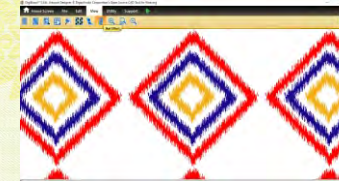


## Artwork Designer

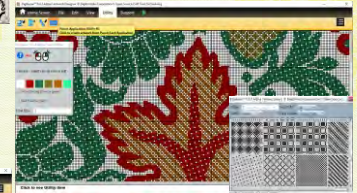
- Direct drawing of motifs on customized graphs.
- Automatic conclude the graph size with density parameters.
- Automatic color reduction & color replacing.
- Design mirroring & repeats.
- Color filled design to sketch transformation.
- Provision to fill weave patterns in designs.
- Area & color based weave filling in Artwork.
- Provision to create IKAT effect on designs.
- Auto Detect & Elimination of Yarn floats.
- Function to produce Numeric form of Graph Designs.
- Support to Manual/Piano/Electronic card punching's.
- Actual size of design printing.



*Design Creation*



*IKAT Visuals*



*Edit on Graph with Weave Patterns*



*Repeat Visuals*



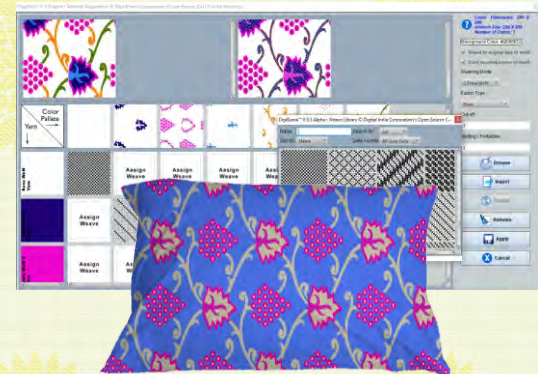


## *Fabric Creator*

- Facility to fill/change weave patterns in Designs.
- Graph corrections to finalize the motif with filled weave.
- Support Extra Warp or Extra Weft weavings.
- Provision to change the yarn density.
- Provision for Yarn sequencing.
- Options to visualize the Front & Back side of the fabric.
- Auto calculate Bill of Material.
- Fabric rendering on 2D objects.
- Provision to customize the graph size of Design.
- Facility to export the Fabric & construction details.
- Support for Electronic Jacquards (BMP).



*Artwork to Fabric Transformation*



*Fabric Rendering on 2D Objects*





## Garment

- Play area for the Designers to predict the Garment before Weaving.
- Predefined & customized layouts of garments.
- Provision to set the component repeats.
- Repeat mode settings for designs on each layout component.
- Option to change yarn colors & density.
- Facility to Save, Export & Print the Layout.
- Provision to export Technical Sheet of Layout.



Body



Skirt



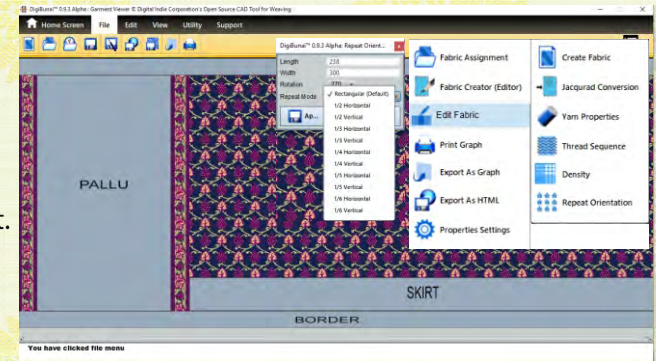
Pallu



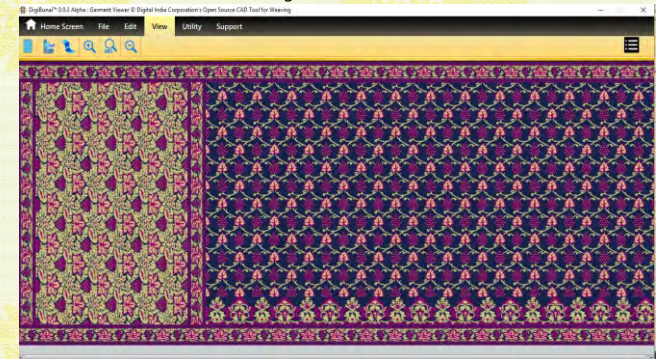
Cross Border



Border



Design & Fabric Edit



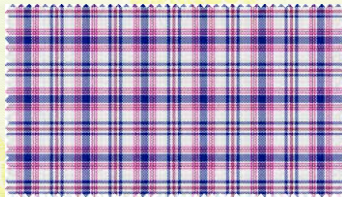
Created Layout



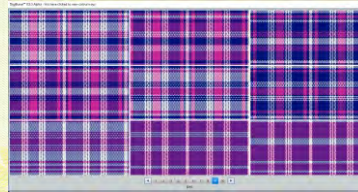


## Dobby Weave

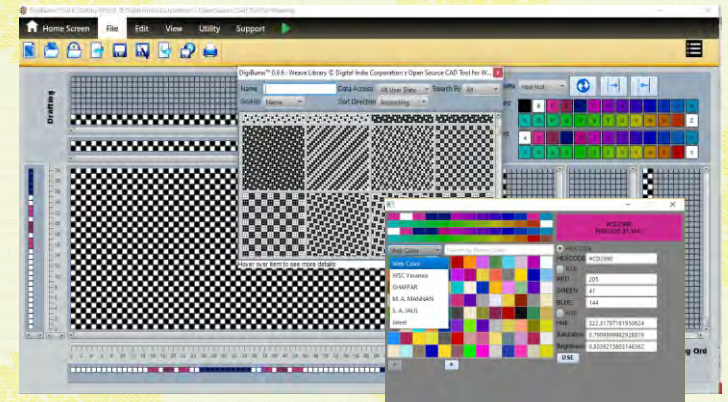
- Facility to create Weave & save in library.
- Auto generating Drafting, Peg Plan, Treadling & Tie-up.
- Weave repeat visualization.
- Library of 545 weave patterns.
- Provision to create Double layer fabric.
- Multi & Complex Weave Generator.
- Facility to create Extra Warp patterns.
- Yarn sequencing.
- Front & Rear side fabric visualization.
- Colorways function to visualize fabric with various yarn color combinations.



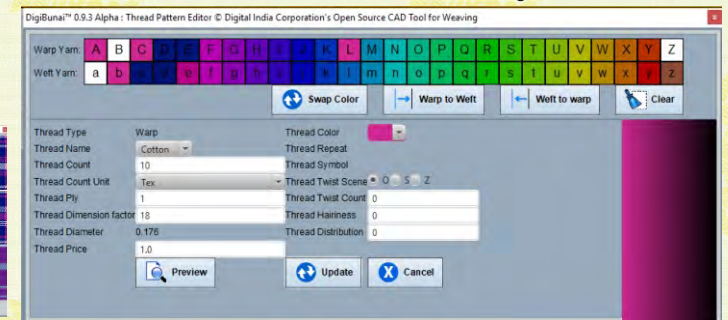
Fabric Visualization



Colorways (Multi Fabric Visuals)



Weave Creation with Yarns Editing



Yarn Color Palette



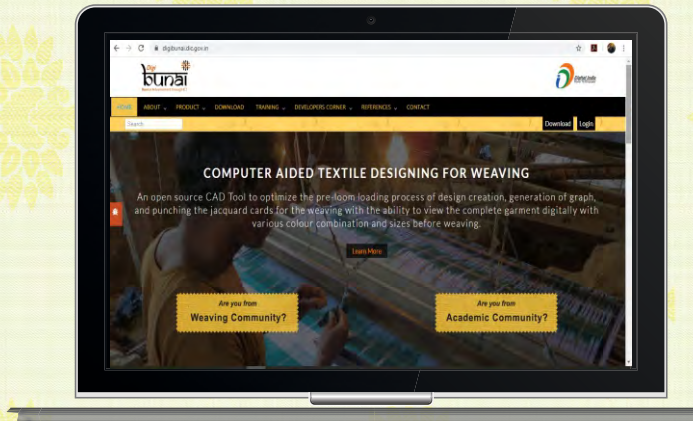






## Support & Requirement

- Download the DigiBunai™ → <https://digibunai.dic.gov.in/index.php/download>
- User Manual → <https://digibunai.dic.gov.in/manual/productmanual.pdf>
- Training Material → [https://www.youtube.com/results?search\\_query=DigiBunai](https://www.youtube.com/results?search_query=DigiBunai)
- Open source repository (GitLab) → <https://gitlab.com/dic-tddd/digibunai>



<https://digibunai.dic.gov.in/>

Requirements	
Operating system	Windows 7, Windows 8 and Windows 10
CPU	i3 or above
RAM	4 GB or above
Environment	Java (JRE 1.7.0.79)
Database	MySQL 5.6 or above

Supported Formats	
Artwork	jpg, png, bmp
Weave	wif, html, png, bmp
Graph	png, bmp
Fabric	html, png, bmp
Garment	html, png, bmp
Color Catalogue	xls, csv



## *Sketch to Fabric Transformation in DigiBunai™*



SKETCH



COLOR FILLED DESIGN



WEAVE FILLED DESIGN



DIGITAL FABRIC

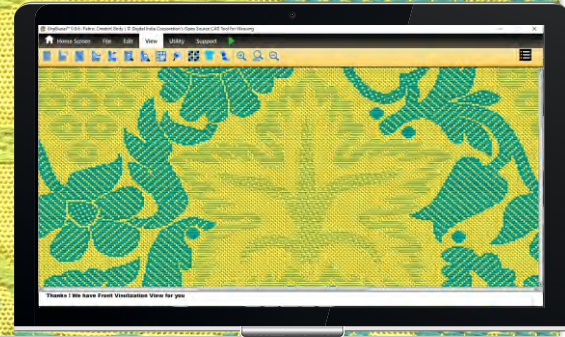


REAL FABRIC



## *Digital Fabric Vs Real Fabric*

Real Fabric



*DigiBunai™ Fabric Simulation*





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