



The International Competition
for Outstanding Carpet Design

Carpet Design Awards 2023 (Carpet Design Awards 2023)

06 Best Collection

Evolving Patterns



PpxOQOYd

Entrant details

Company Name	Private Label Sdn Bhd
Company address	
35 Jalan Telawi 6 Bangsar Baru Kuala Lumpur 59100 Malaysia	
Phone	+60122682987
Company e-mail	azmi.merican@gmail.com
Website	http://www.azmas.in/
Job description	Founder of Azmas Rugs

Entry details

Your Company Name	Private Label Sdn Bhd
Are you an exhibitor at DOMOTEX 2023?	<input checked="" type="checkbox"/> We have not yet decided whether we will exhibit at DOMOTEX. Please contact us about possible participation options.
I hereby confirm that all information is correct. I have read the conditions of participation and agree to them	<input checked="" type="checkbox"/>

(please see the About section/Conditions of Participation for details).

Design/Design Concept

This collection of rugs comprises experiments in the creation of floorcoverings incorporating "evolving patterns".

An evolving pattern is a kind of animation in space rather than in time.

Instead of creating a large field of identical copies of a single motif (pattern repeats), our motifs slowly undergo a process of change. The result avoids the monotony of pure repetition, producing a sense of flow, progression, and narrative structure to the finite canvas of a rug. Evolving patterns can imbue designed objects with visual interest without overwhelming the eyes.

This style of design was explored most famously by the Dutch artist M.C. Escher in his "Metamorphosis" prints, in which lifelike animal forms grow and interact on the canvas. Inspired by Escher, the designer William Huff later introduced Parquet Deformations, a drafting exercise in which design students created abstract tessellations that evolved spatially. These ideas were popularized in America in the pages of Scientific American: Escher by Martin Gardner, and Huff by Douglas Hofstadter.

Our aim is to develop textiles that evoke a sense of texture (touch and feel) that can decorate a space with clean simple lines and shapes ;and an uncluttered look. Developing "evolving patterns" might give us a better sense that our world is dynamic and ever-changing rather than static.

The EP rugs include collaborations with Professor Craig S. Kaplan, David Mrugala and Michael Rowan to each of whom I am grateful. Working as a collective has given wider insight into our explorations. Coding has been used by them to create patterns digitally. This represents a new tradition that supplements the hand-drafted drawings produced by students of Huff.

Azmas Rugs co-sponsored the publication this year of Werner Van Hoeydonck's book Space Tessellations: Experimenting with "Parquet Deformations" (ISBN-13: 9783035625172) which is a major review of developments in this field.

Material/Execution/Structure/Quality/Originality

The flatweave technique used for these rugs is a natural physical medium in which to express the designs. The grid-like structure of the weave evokes the precision of the pixel grid in computer graphics, but gives that precision a softer, more organic appearance through the hands of the human weavers who bring the design to life.

1. Grid by Kaplan.

Professor Kaplan has conducted research on algorithms for drawing geometric patterns that evolve. For this rug he adapts a visual device he calls "grid-based evolution", found in many of the drawings created by Huff's students. The 2D space is subdivided into squares and in steps the shape shifts one grid square at a time.

2. Shapeshifter: Michael Rowan

The pattern is Escher-esque. Two interlocking tiles ("A" and "B") evolve. The color blue "identifies" Shape A as the figure. It evolves from a rectangle to a hexagonal-lozenge and lightens colorwise. The ground B evolves in shape only from a rectangle to a bow-tie.

3. Oscillation of Grid 0 to 1: David Mrugala

Oscillation is a property of proportional harmony. This rug expresses this harmony in a repetitive variation between two states, from 0 to 1 and back to 0. This rug captures the movement of varying colors and shapes, always in a constant state of change. The size of the rectangles shifts according to the algorithm which is based on the Sine function.

4. The Shape of Fortuity: David Mrugala

"A state of being controlled by chance rather than design". This rug is both, design and chance that is embodied in a grid of triangles and similarity. The design's algorithm enables the design to be altered infinitely.

5. Cafe de Jazz. Azmi Merican

The columnar figures are manipulated horizontally in order to give a sense of movement evoking musical notes.

Sustainability

The rugs are handwoven dhurries in Cotton, Wool and Bamboo Cotton in Rajasthan. We believe that a flatweave structure is the best way of showing these patterns through its tactile qualities.

A sustainable economy is not invented in a design studio.

We are aware of The Modern Artisan project by Federico Marchetti which is a blueprint for what fashion (and home furnishings) can do to become circular and responsible. The ecosystem of the agriculture or production method used for the raw materials; the processes of washing and dyeing the yarns should all be assessed for their sustainability. In particular, attention has to be given to wastewater treatment prior to discharge for use in say agriculture to ensure that there is no damage to the environment.

It is possible to weave designs in PET yarns made from recycled plastic bottles but subject to a higher production run. Certification by a Fair Trade Organization also needs to be backed by higher volume.

We are inspired by the brand Shyam Ahuja which revived the handcrafted tradition of flatweaving. All his creations were handmade from first step to last. The emphasis is on quality over quantity, craftsmanship rather than over-consumption.

David Mrugala believes that rug weaving patterning can be transformed using 21st Century digital design. Instead of designing ever more intricate patterns the focus is on clean lines with simple pattern and coloring.

Branding

1. "Evolving patterns" are visual and tactile explorations in asymmetry.

Developing "evolving patterns" might give us a better sense that our world is dynamic and ever-changing not "static and symmetric". Appearances that seem symmetric superficially are in fact asymmetric, for example the human face, DNA (which is right handed), a glucose molecule, etc. (Reference: Lucifer's Legacy: The Meaning of Asymmetry. Frank Close ISBN 0-19-866267-X.)

MC Escher's drawing no. 67 "Horsemen" was first used to conceptually illustrate situations in nuclear physics where left/right symmetry is violated by weak interaction on the cover of the book Elementary Particles by Nobel Physicist Chen Ning Wang in 1963. (Also in Lucifer's Legacy at page 195).

2. Our explorations seem to co-relate to a few of the exercises* from the Basic Course at the University of Ulm:

- a. Parquetry/Tiling
- b. Exactness through inexactness
- c. depth perception studies
- d. contrast through interaction of color

This curriculum was developed by Thomas Maldonado and Josef Albers in post-war Germany.

"Parquet Deformations" as taught by Professor William Huff emerged as an "asymmetry out of symmetry" exercise in Tiling. Weaving can be classified as a study of "exactness through inexactness". In coloring the patterns one needs to be aware that color contrast and the creation of depth can create confusing perceptual effects and to avoid them.

*pages 65 to 90 Space Tessellations. "Grundlehrer at HfG" by Professor William S Huff.

3. "The governing criteria is that I must first conceive a special weave and texture, then create restrained designs to suit the particular weave."

Shyam Ahuja

We are delighted to receive guidance in product development from Mr. Aditya Ahuja, the grandson of Shyam Ahuja who in the 1970s developed an international weaving brand. Thanks to him we have a side project: "SUNNY GRACE" studying asymmetry through screen printed cushion covers.

<https://wernervanhoeydonck.blog/>

Other

Our team:

Craig Kaplan is an Associate Professor in the School of Computer Science at the University of Waterloo, where he studies the application of computer graphics and mathematics to problems in art, design, and architecture. He also helps organize the annual Bridges conference on intersections between art and mathematics.

David Mrugala is an Assistant Professor in architecture at Keimyung University in South Korea. David was educated in Germany where he received his Dipl.-Ing. with distinction at the Karlsruhe Institute of Technology. He has worked for several international practices in Germany, India and Thailand. David founded "thedotisblack", a platform for research design that aims on the development of design knowledge through generative drawings made with code.

A Computational scientist with a background in physics, Michael Rowan completed his doctorate in theoretical physics at Harvard University. Whether it is in programming, physics, or mathematical art, Michael is inspired by the idea that simple rules can lead to unexpected structure, and likes to create works guided by this principle.

Werner Van Hoeydonck co-authored "Space Tessellations" which has been published in May. His approach to design includes hand-drawings to create subtle asymmetry or dissonance in pattern.

Azmi Merican worked in a home-furnishings business from 1983 to 2000 where he was a buyer for the brand Shyam Ahuja. He worked as a consultant with Mascot Industries from 2000 to 2013 to develop woven products that exhibited at German tradefairs.

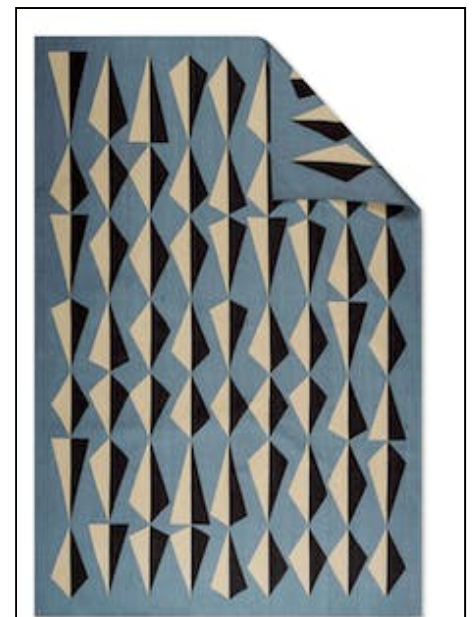
Shan Shan Lim is a multidisciplinary artist specialised in weave and print. She is a graduate from Central Saint Martins, earning a BA in Textile Design.

Azmas Rugs has yet to interpret any of the patterns of Professor Huff's students as rugs. We hope we will be able to do so in constructions such as flatweaves, "Sardinian" and handknotteds.

Log in to enter.carpetdesignawards.com to see complete entry attachments.



Tessera design - ... 2.8 MiB



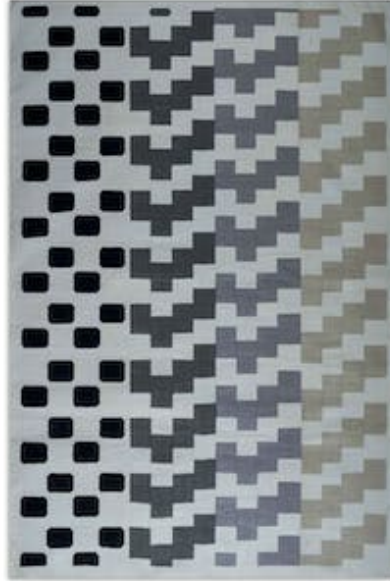
[Grid by Mrugala....](#) 822 KiB

[the shape of fort...](#) 501 KiB



DESIGN NO CD 2065 COTTON YARN 5x7 FEET

[michael rowan s...](#) 625 KiB



[DSCF3486.jpg](#) 733 KiB