

# Professor Jim Goetz 2025 Photo Essay Contest Winner

## “Beautiful Patterns in Nature”



by  
**Jaren Tasnim**



The photograph features a close-up view of a succulent plant. The plant has numerous fleshy, somewhat paddle-shaped leaves arranged in a tight, symmetrical rosette pattern.

The photograph presents a close-up view of a whole Pineapple. The pineapple's skin, or rind, is composed of numerous hexagonal segments, each with a raised, scale-like texture.

The photograph features a close-up of a pine cone, likely a male pine cone due to its elongated shape and the presence of pollen-producing structures. The cone is composed of numerous small, scale-like structures arranged in a spiral pattern around a central axis.

The photograph showcases a segment (cladode) of a prickly pear cactus. Dotted across the surface of the cladode are numerous areoles, small, cushion-like structures. The areoles appear to be arranged in a somewhat diagonal grid pattern across the surface of the cladode.

The photograph is taken from a low angle, looking up into the canopy of a mature tree. The branching pattern appears to be somewhat dichotomous or irregularly branching, where larger branches split into smaller ones, and so on.

The photograph shows a cluster of young fern fronds, commonly known as fiddleheads, in their tightly coiled stage. The fiddleheads exhibit a distinct spiral pattern as the fronds emerge. This coiling is consistent across multiple fiddleheads in the image.

The photograph features a close-up of a dandelion seed head (also called a dandelion clock). The pappus structures radiate outwards from the center, creating a radial symmetry pattern.

The photograph shows a single green leaf. Prominent veins are visible across the surface of the leaf, branching out from a central midrib. These veins create a hierarchical, branching pattern.

The photograph shows a close-up of a plant with highly divided, feathery leaves. The primary pattern is the pinnate compound leaf structure, where leaflets are arranged along a central stem, like the barbs of a feather. The individual leaflets have a consistent, finely divided shape, contributing to the feathery appearance.

The photograph features a close-up of a pink flower. The flower has numerous petals arranged in a layered, somewhat ruffled pattern. The petals radiate outwards from the center of the flower, creating a circular or star-like pattern. The petals are also arranged in a subtle spiral pattern as they layer outwards.

