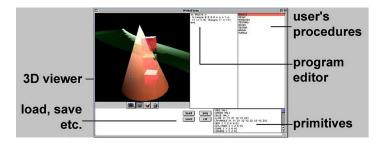
FormWriter

a computational environment for making form algorithmically

Mark D. Gross, Mamoun Sakkal

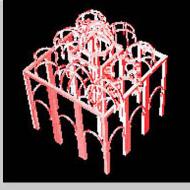


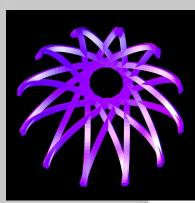


FormWriter is an elementary programming language for designers to generate form algorithmically. It is simple and powerful, making it easy to write code that generates form. This enables a designer to explore three-dimensional parametric forms, as well as more complex mathematical shapes and configurations that ordinary CAD modelers cannot easily generate.

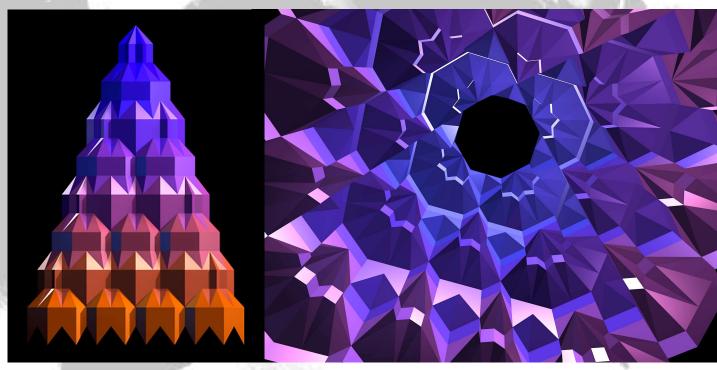


Algorithms can be used to generate novel architectural forms, but they can also describe traditional systems of built form. We used FormWriter in a course on "Computational Geometry in Islamic Architecture." Students with little or no previous programming experience used FormWriter to build computational models of Islamic architectural form systems such as star ribbed domes, and muqarnas. The results, shown left, were astonishing.





Models of historic Islamic structures by (top to bottom): Kirsis, Sullivan, Garrett, Yap.



Models of traditional muqarnas domes at Sultan Han, Turkey and Geghard, Armenia

