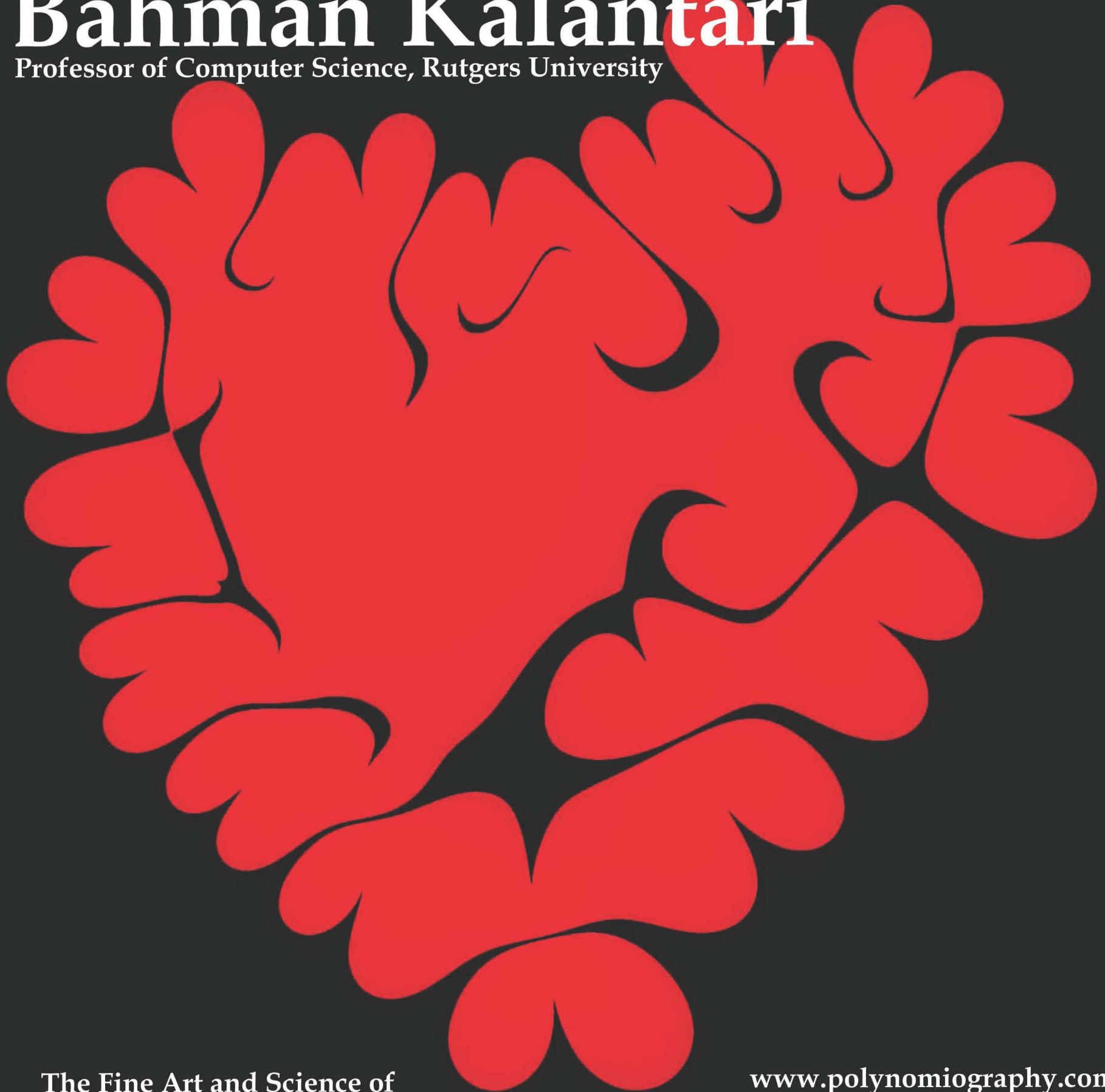


Bryn Mawr College Presents

Bahman Kalantari

Professor of Computer Science, Rutgers University



The Fine Art and Science of

www.polynomiography.com

POLYNOMIOGRAPHY

**You Don't Have to be a Mathematician
to Become a Polynomiographer**

Thursday, February 16, 2012

2:30p to 3:30p

Room 338, Park Science Building

Polynomiography is creative computer visualization that renders spectacular 2D images of a polynomial equation. It makes use of mathematical properties of iterative systems for solving a polynomial equation. Working with Polynomiography software is similar to learning to work with a sophisticated camera: one needs to learn the basics, the rest is up to the photographer. I will exhibit many sample polynomiographs and describe many applications of Polynomiography in math and science, education, art, design, architecture, even fashion. In particular, I will speak of educational experiences with Polynomiography in courses where the goal is to connect art, mathematics, and algorithms, while promoting creativity of different kinds. The visual strength of Polynomiography and its basic foundation has attracted students from various backgrounds. Projects based on Polynomiography include such diverse applications as: Art, Dance, Linguistics, Psychology, Math, Education, Computer Graphics, Computer Science, Symbology, Music, Architecture, Ecology, Neuroscience, Special Education, Chemistry, and Religion. Polynomiography has also inspired the discovery of new properties in algebra, geometry and computational geometry as well as novel applications that give rise to new and challenging research problems.

