Poughkeepsie Chapter of the Association For Computing Machinery

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   aaa          ccccccc       mmmmm   mmmmm
  a   a        cc     cc     mm mm   mm mm
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MEETING NOTICE

Free and open to the public

Topic: **Switching Circuits Designs from Biological Evolution**
Speaker: **David Clark**
When: **Monday, September 19, 2022, 7:30 pm**
Where: **In Cyberspace**

Directions: To obtain the URL for this video conference, *you **must** register to attend through* https://meetup.com/ACM-Poughkeepsie/events/287700445/ Once you've done so, your Zoom link will appear on Meetup's page after 6:00 PM the night of this event.

About the Topic: This talk will present an algorithm that is the product of fifteen years of work in evolutionary computation. The algorithm is experimentally shown capable of finding very complex designs for electronic switching circuits in astronomically large search spaces within a few seconds. This is achieved by mimicking biological evolution, producing each new generation through sexual reproduction. We will outline the proof of a theorem showing that, with probability one, the algorithm will terminate in finite time with a solution.

About the Speaker: David Clark, Distinguished Emeritus Professor of Mathematics at SUNY New Paltz, has published contributions to mathematics in the fields of universal algebra, mathematical logic, mathematics education, neural networks and, in the past decade, evolutionary computation. He is a founder of and course notes editor for the widely used Journal of Inquiry-Based Learning in Mathematics. During his forty three years at SUNY New Paltz he held temporary research positions in Germany, Portugal, Switzerland, Canada and Australia, and spent nine years as department chair. During six years as associate dean, he founded the Scientific Colloquium Series, and led the establishment of an environmental science major. Along the way he pursued rock climbing and hang gliding while helping to raise five daughters, and he continues to be an active amateur astronomer.

Cost: **Our meeting is Free and open to the public**
Dinner: **Because our meeting is virtual, we will not hold our normal dinner beforehand at the Palace Diner.**

We thank Marist College for providing web conferencing service.

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