

Volunteer Computing Games



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Education

Ph.D., Computer Science, University of Nebraska—Lincoln
M.S., Computer Science, University of Nebraska—Lincoln
M.S., Discrete Mathematics, Michigan Tech
B.S., Pure Mathematics, Michigan Tech

Areas of Expertise

Algorithms, Graph Theory, Combinatorics

Grants and Awards

HHMI Faculty Development Grant for
Interdisciplinary Research

Recent Publications and Presentations

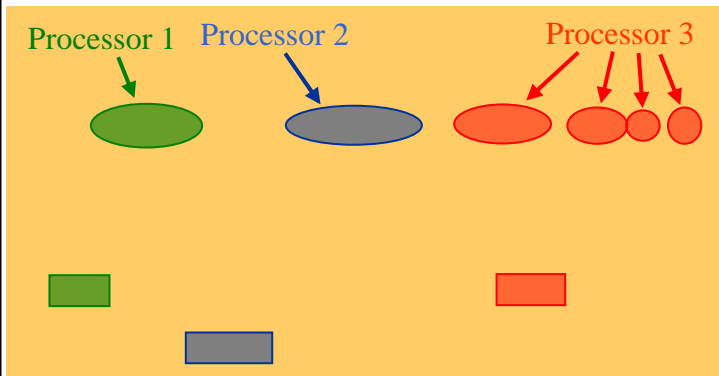
Charles Cusack, Chris Martens, Priyanshu Mutreja, "Volunteer Computing Using Casual Games," presented at *Future Play 2006 International Conference on the Future of Game Design and Technology*, London, Ontario, Canada, Oct 10-12, 2006. Published in Conference Proceedings.

Gretchen C. Foley, Charles A. Cusack, "Computer-Assisted Analysis of Music in George Perle's System of Twelve-Tone Tonality," *Computer Music Journal*, 30 (2006) No 3, pp. 53-66.

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A *volunteer computing game* is a casual game which is an implementation of a volunteer (distributed) algorithm

The idea is to use casual online video games to solve real problems



How do you turn something like this...

into something like these



Bejeweled



Diner Dash 2

The goals include increasing participation in volunteer computing and harnessing human insight into various sorts of problems