

Talk Math 2 Me

Analyzing Data using Computational Topology

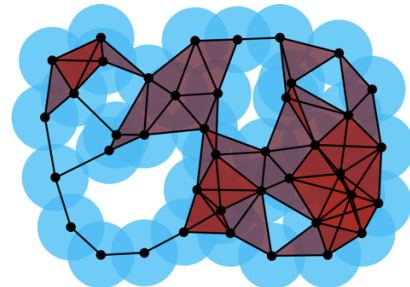
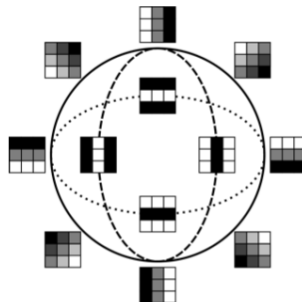
The Students in Dr. Snyder's MATH 4336:
Blaike Bradford, Marcus Cisneros, Brandon Garcia, Nathan Jones,
Ethan Roberts and Robert Sparkman

Friday December 1, 2017
DERR 329
12:00pm- 1:00pm

Abstract

We student researchers will be presenting various applications of computational topology to data analysis, looking for global features hidden within interesting data sets. Data sets discussed, depending on time constraints:

- United Nations General Assembly voting data (to identify and distinguish consensus blocs)
- Tennessee counties' income growth rate data (to identify and distinguish economic growth factors)
- Ted Talk keywords (to identify hidden connections between speakers' topics)
- Brexit voting data (to geographically locate voting blocs of interest)
- range image patches (for image recognition applications)
- cyclo-octane molecule conformations (for physical chemistry analysis)
- optical image patches (for image recognition applications).



This seminar is sponsored in part by Pi Mu Epsilon and the Texas State University Department of Mathematics. For more information or to sign up to speak, contact Ellen Robinson at ebr21@txstate.edu.