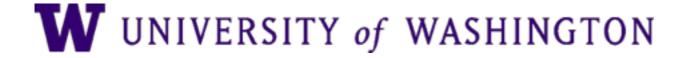
ME 599/AA 546/EE 546: Biology-inspired robot control

Lecture 7
Sawyer B. Fuller

Goals:

- Introduce Paper4
- Presentation and discussion of Paper 3 by Sam Hordeski



Friday's paper: "Designing Collective Behavior in a Termite-Inspired Robot Construction Team", Werfel, Petersen, and Nagpal *Science* (2014).

- termites build enormous mounds
 - but what rules do they follow?
 - how would you design those rules?
- this paper has two big ideas:
 - 1. construction by using rules describing interaction with the constructed environment
 - 2. one solution for how to specify those rules to create a desired shape





Insects build complex large-scale structures. Each acts independently;