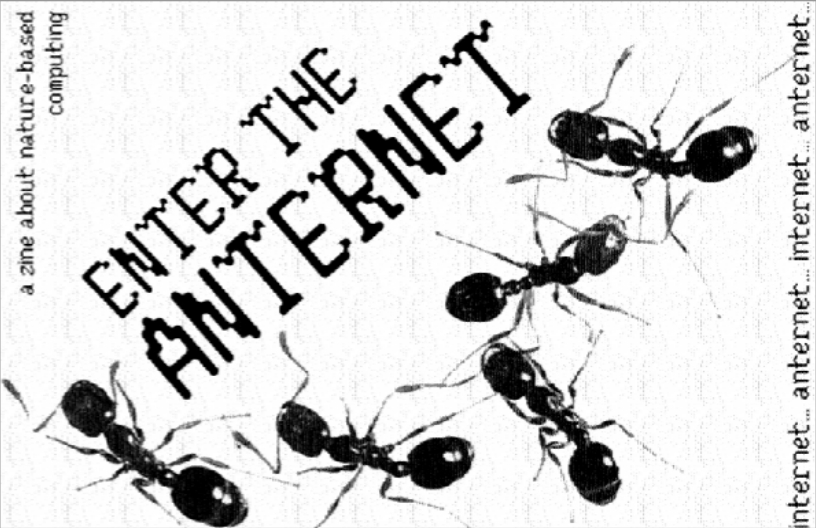
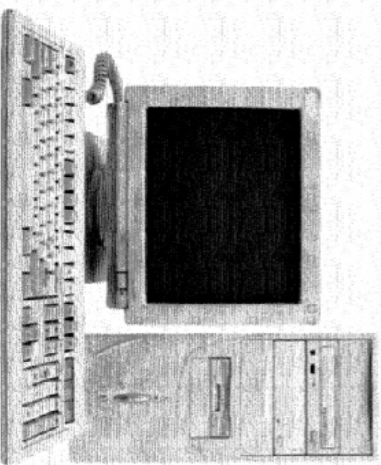


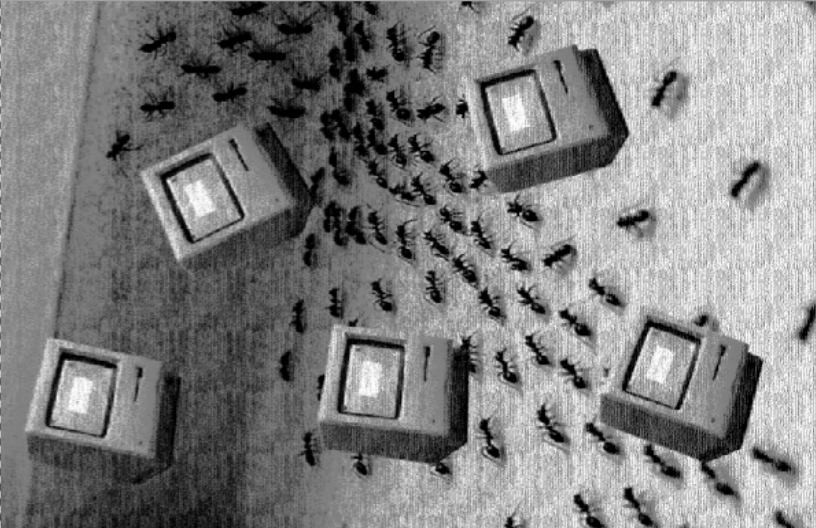


a zine about nature-based computing

if you crack open your
COMPUTER



you'll find a tiny ant colony
next to the
CPU



harvester ants model

Transmission
Control
Protocol
algorithms

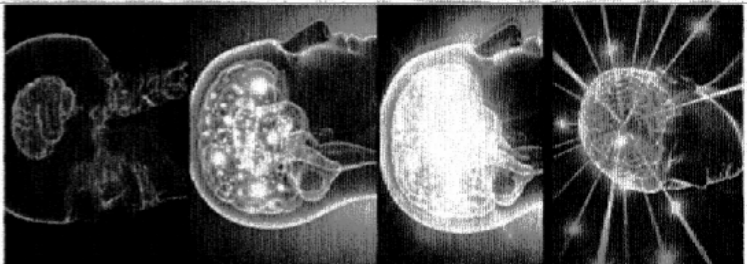
I got food...

now it's my turn...



SPACE PARTITIONING	CELL CYCLE SWITCH
APPROXIMATE MAJORITY	
NETWORK ROUTING	SLIME MOLD
PROBABILISTIC INFERENCE	SPIKING NEURONS
NETWORK DESIGN	PROTEIN INTERACTIONS

What other natural
processes mirror
computational
systems?



ENTIRE
ANT COLONY

FOUR ANTS

TWO ANTS

ONE ANT

ANTS vs. INTERNET

more ACKS ->
food availability ->
ants keep searching

less ACKS ->
food scarcity ->
ants stop searching

more ACKS ->
bandwidth availability ->
data (in the form of packets)
can be sent

less ACKS ->
network congestion ->
connection times out

ANT ALGORITHMS ARE
SIMPLE
&
DISTRIBUTED
&
SCALABLE

qualities that are essential
in large engineered
distributed systems