# Applicability of Decentralized SAS systems on Game Development

# Self Adapting Systems (SAS)

Modify behavior at runtime

Adapt to environment

Single loop controlling behavior

Applications

**Cloud Computing** 

Power Grid

Autonomous Vehicles?

# Applicability of Decentralized SAS systems on Game Development

### Decentralized SAS

Multiple loops modifying behavior at runtime Each coordinate with the others

Lack central control

Autonomous Vehicles

# Fishy

Flash game

Eat smaller fish

Avoid larger fish

## My Project

Research based project

Proof of concept

Continuation of previous research

#### Demo

https://youtu.be/P0cSX1ET\_yE

https://youtu.be/DFP0P0pY-8c

## Gantt Chart

GANTT		<b>\$</b> -		tember Chart	2024							Oct	ober :	2024													
Name	Begin date	End date	21	22 2	3 24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 15	16 17
Gantt Chart	9/21/24	9/21/24		-																							
Grow in size	9/22/24	9/22/24																									
Game over	9/22/24	9/22/24																									
Start Over	9/22/24	9/22/24																									
Resize	9/22/24	9/22/24																									
Score	9/23/24	9/23/24																									
Textures	9/24/24	9/26/24																									
Measure Framerate	9/27/24	9/28/24																									
Unlock Framerate	9/27/24	9/28/24																									
Framerate Happiness	9/29/24	9/29/24																									
Setup Enemy Stats	10/3/24	10/3/24																									
Add enemy sight	10/4/24	10/6/24																									
Add Difficulty Scaling	10/11/24	10/13/24																							]		
Add Varing Enemy Size	10/14/24	10/14/24																									
Add Varing Enemy Speed	10/15/24	10/15/24																									