

March 27, 2025

Announcements

- Proj. proposals
- Paper resp,

Goals

- OOP fun
- Why GPUs?

Review

Object-Oriented Programming

Object-oriented programming: The weapon of choice for encapsulation and separation of concerns!

Performance perspective on OOP?

- AOs

- Implicit behavior

• copying : $\frac{N}{n}$ / RVO

• move semantics

- Implicit creation of temporaries, ~~at a time~~

animal * pet;
pet → walk();

Demo: machabstr/Object Orientation vs Performance

Recipes use coarser grains



class ~~Triangular~~ Element;

Float vertices [3];

method integral();

Triangle back

Core

- ~~"has a program counter"~~
- ~~ALU~~
- can fetch instructions