

Agenda

- Thinking about Machine structures
- Great Ideas in Computer Architecture
- What you need to know about this class

Thinking about Machine Structures

CS61C is Not about C Programming

- It is about the hardware-Software interface
 - What does the programmer need to know to achieve the highest possible performance
- Languages like C are closer to the underlying hardware, unlike languages like Snap!, Python, Java
 - We talk about hardware features in higher-level terms
 - Allows programmer to explicitly harness underlying hardware parallelism for high performance

Great Ideas in Computer Architecture

6 Great Ideas in Computer Architecture

1. Abstraction (Layers of Representation / Interpretation)
2. Moore's Law
3. Principle of Locality / Memory Hierarchy
4. Parallelism
5. Performance Measurement & Improvement
6. Dependability via Redundancy