### CSE 230

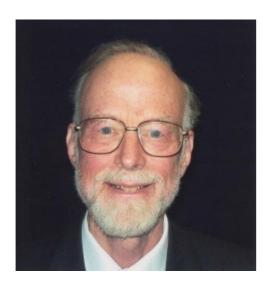
# Programming Languages

#### **ZOOM 101**

Please "mute" your Mic
By default, unless I call on you

If you have a question "raise hand" or type question in chat

Lectures split into ~ 3-4 segments ~15 mins "lecture" + ~5 mins "exercise"



### Tony Hoare Turing Award Lecture 1980

"There are two ways of constructing software.

One way is to make it so simple,
that there are obviously no deficiencies,
The other way is to make it so complicated
that there are no obvious deficiencies."

### Readable

### Reusable

### Modifiable

### Predictable

### Checkable

### Yes, but how?

#### Functional Programming(?)

#### **Functional Programming?**

No Assignment.
No Mutation.
No Loops.

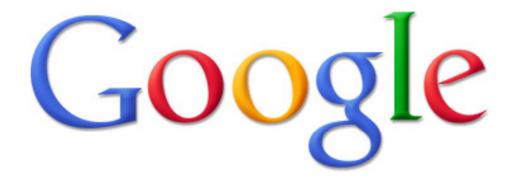
#### PL Researchers.

#### **Functional Programming?**

Readable
Reusable
Modifiable
Predictable

Checkable

Parallelizable



MapReduce

# Google







#### Scala

### facebook

Erlang



Erlang

## CSE 230

#### **CSE 230: Medium of Instruction**



#### Bleeding edge PL.

#### Beautiful.

#### Blows Your Mind.



Alan Perlis
Epigrams In Programming

"A language that doesn't affect how you think about programming, isn't worth knowing"

Fun.

#### CSE 230: Outline

Readable 1. FP & Abstraction Reusable

Modifiable
Predictable
Checkable

Predictable -2. Types & Analysis

#### CSE 230: Webpage

All materials (lectures, assignments, piazza) at:

https://ucsd-cse230.github.io/fa21

Please sign yourselves up at PIAZZA

#### CSE 230: Lectures on Zoom

Recordings available on CANVAS

Each lecture is about 3-4 segments

- ~15 mins "RJ: lecture/Q&A"
- ~5 mins "You: exercise"

#### CSE 230: Grading

[70%]: 4~5 Programming Assignments

[30%]: Final Project

[5%] : Extra Credit for top-15 Piazzars

