Computer Science I

CMPE/CSCI 1370 - 01

MW 9:25 am - 10:40 am

http://bit.ly/votingcards

JJ Lumagbas

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Peer-instruction Think - Pair - Share

Me:

- A. Not from around here
- B. Have a BS and Masters
- C. Currently working on PhD
- D. Worked as full time programmer for 4 years
- E. Taught at university-level since 2008

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Me:

- A. Lived inside a church building til 18yo
- B. Went skydiving with wife when son was10mos
- C. Has freedived to 25ft (no scuba gear!)
- D. Worked as a barista in Melbourne, AU
- E. Had eye poked repeatedly with a needle (not by accident)

What's your current major?

- A. Computer Science
- **B.** Computer Engineering
- C. Other Engineering
- **D. Other Science**
- E. Other

How much programming experience do you have?

- A. None
- B. 3 months or less
- C. 6 months or less
- D. 1 year or less
- E. More than a year

What is a program? What is programming? What is a programming language?

WHAT IS A PROGRAM?

WHAT IS A PROGRAM? Inputs -> Process -> Outputs

WHAT IS PROGRAMMING?

WHAT IS PROGRAMMING? **Encoding information as data** Listing instructions to operate on that data To produce a result

WHAT IS A PROGRAMMING LANGUAGE?

WHAT IS A PROGRAMMING LANGUAGE?

Arbitrary set of words that represent:

Data

Operations

Control structures





Write a program that converts a black and white image to its negative

WHAT IS PROGRAMMING?

- 1. Encoding information as data
- 2. Listing instructions to operate on that data
- 3. (To produce a result)

WHAT IS PROGRAMMING?

- 1. How do we represent a black and white image as data?
- 2. Which instructions and operations do we need to perform on that data?

Project demos

Syllabus highlights

http://github.com/jjlumagbas/1370

http://bit.ly/1370codenames

Photo