Lesson 26:

1. Past, Present, and Future

Summary then field trips! Computer history museum, going to visit UC Berkeley!

1. Themes

Abstraction, universality, recursive definitions.

1. Overview
2. Quiz: Computer Science

Computer programming is an engineering, science, and a liberal art.

1. Computer Science

Design under constraint, understanding nature through observation, language to communicate between others.

1. Past of Computing
2. Computer History Museum

Abacus to smart phone.

1. Babbage Engine

Very mechanical.

1. First Hard Drive

RAMAC 350, designed to hold 50,000 air force records.

1. Search Before Computers

Tablets used for searching a long time ago.

1. Search on the Web

Google Server from 1999. You can pay for ads on Google Search, and it made Google rich.

1. Present of Computing
2. Slac and Big Data

Particle Accelerator – data intensive. 1 PB/sec looking for Higgs Boson. It was found since the video was made.

1. Mozilla
2. Open Source

Free to see and modify. You can take Mozilla, but you must return altered and improved code.

1. Getting Involved

Anyone can contribute to open source code.

1. Having an Impact
2. Benetech
3. Future of Computing

SODA Hall

1. Text Analysis

Brian Gawalt, turn unstructured text into a Hash Table. Text processing.

1. Energy Aware Computing

Sarah Alspaugh, trying to create a computer cluster based on energy input from wind and solar.

1. Computer Security

Adrienne Felt, android developer security, tool that analyses what permissions an app uses before putting it on the android market.

1. Theory of Computation

Isabelle Stanton, computational economics. Initial tournament seating changes outcome.

1. Quantum Computing

Brielin Brown, qubits can be in superposition. More powerful than normal bits.

1. Stay Udacious