

## Overview

[CS50.tv](#) is home to the OpenCourseware for CS50. Effectively, it is an archive of all lectures, seminars, problem sets, demo code, and more from previous iterations of CS50. All materials on CS50.tv are open to the public. It is a useful resource for obtaining supplementary classroom materials. Using Google Translate, you can also change the language of the site.

## Materials

**Lectures:** Presentation of material from David Malan and friends organized by topic. Audio, official notes, slides, source code, and various video formats are available for each lecture.

**Problem Sets:** Collection of problems for hands-on experience with concepts. Specifications are supplied with supplementary source code when necessary.

**Walkthroughs:** Supplemental videos to lectures that provide guidance for tackling problem sets.

**Shorts:** Videos that are supplemental to lectures, investigating individual concepts more in-depth.

**Seminars:** Additional videos that cover material beyond the scope of the course.

### Key Terms


- CS50.tv
- lectures
- problem sets
- walkthroughs
- shorts
- seminars


CS50.tv

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Computer Science 50: Introduction to Computer Science I  
Fall 2016

**This is CS50.**  
Introduction to Computer Science I  
Harvard College

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Introduction to the intellectual enterprises of computer science and the art of programming. This course teaches students how to think algorithmically and solve problems efficiently. Topics include abstraction, algorithms, data structures, encapsulation, resource management, security, software engineering, and web development. Languages include C, Python, SQL, and JavaScript plus CSS and HTML. Problem sets inspired by real-world domains of biology, cryptography, finance, forensics, and gaming. Designed for concentrators and non-concentrators alike, with or without prior programming experience.

AboutLicenseGoogle Group

This is CS50 OpenCourseware.

Computer Science 50 (otherwise known as CS50) is [Harvard College](#)'s introductory course for majors and non-majors alike, a one-semester amalgam of courses generally known as CS1 and CS2 taught mostly in C.

Even if you are not a student at Harvard, you are welcome to "take" this course via [cs50.tv](#) by following along via the Internet. (The course's own website is at [cs50.harvard.edu](#).) Available at right are videos of [lectures](#), [walkthroughs](#), and [seminars](#) along with PDFs of all handouts. Also available at right are the course's [problem sets](#).

If you're a teacher, you are welcome to adopt or adapt these materials for your own course, per the [license](#).

If you'd like to take this course for real (on Harvard's campus or via the Internet) in

LecturesProblem SetsWalkthroughsShortsSeminars

These lectures were produced in [Sanders Theatre](#) in [Memorial Hall](#) by Dan Coffey, Lauren Scully, Ian Sexton, and Jordan Hayashi. Notes were taken by Cheng Gong.

- Week 0 Scratch
- Week 0 at Yale Scratch
- Week 1 C
- Week 2 Arrays
- Week 3 Algorithms
- Week 4 Memory
- Week 5 Data Structures
- Week 6 HTTP
- Week 7 Machine Learning
- Week 8 Python
- Week 9 SQL
- Week 10 JavaScript
- Week 11 The End
- Week 11 at Yale The End