

# Welcome to Internet History, Technology, and Security

Dr. Charles Severance <csev@umich.edu>

<http://www.dr-chuck.com/>

Twitter: @drchuck



<https://www.coursera.org/course/insidetheinternet>

coursera

# Who Should Take This Course?

- Everyone (including your friends and family) !
- There is no math. There is no computer programming. Really.
- We talk about cool technical things but it is not a technical course.
- The purpose of this course is to explain things and make you think and reflect

# What is the Course About?

- Oral history from Internet and Web innovators
  - Not just names and dates - real history is a bit messy
  - You will need to interpret and think critically
- How the Internet and Web function

Dr. Chuck...





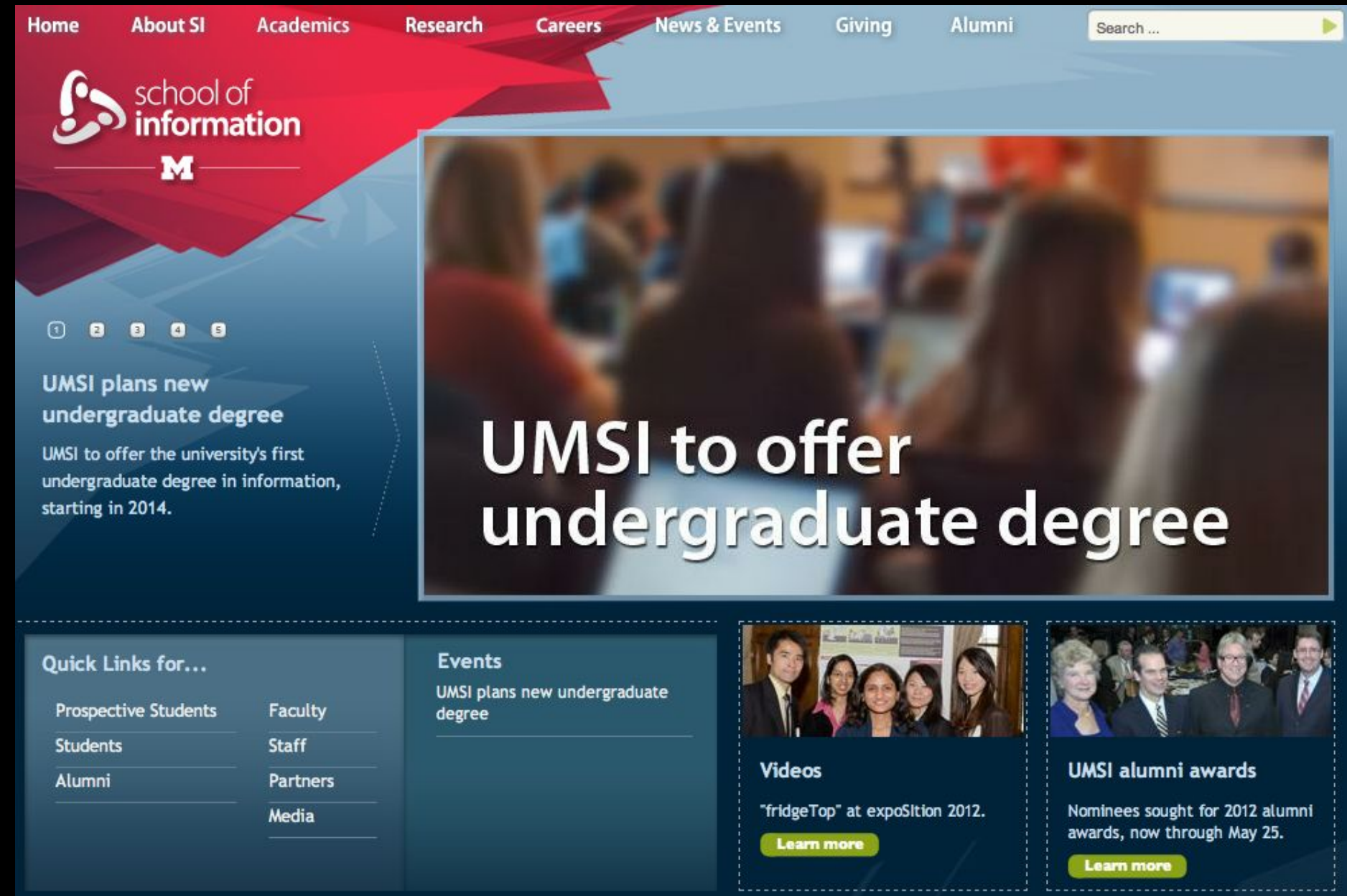
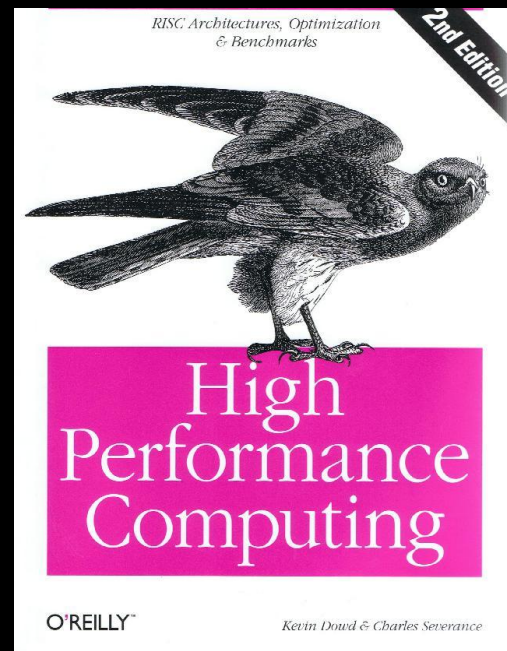
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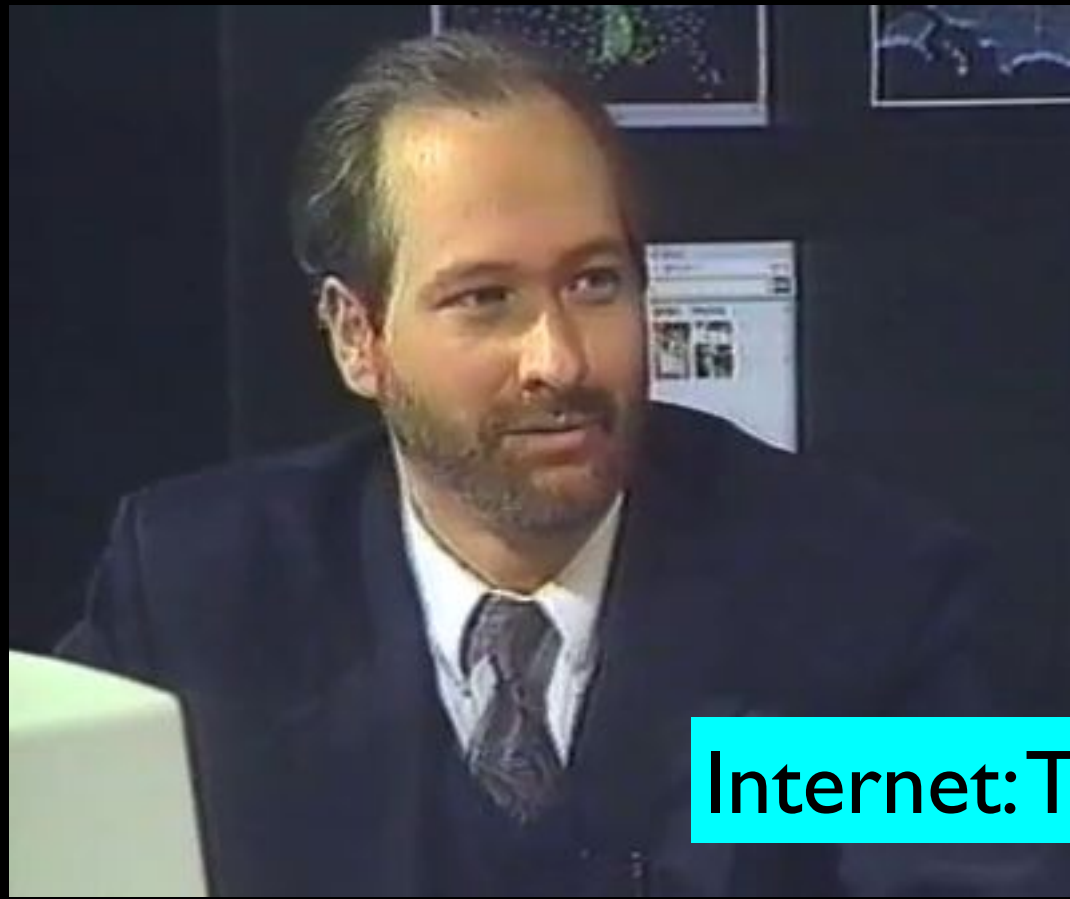


Dr. Charles  
Severance Clinical Associate  
Professor  
University of Michigan  
School of Information  
Twitter: @drchuck  
www.dr-chuck.com



[www.si.umich.edu](http://www.si.umich.edu)





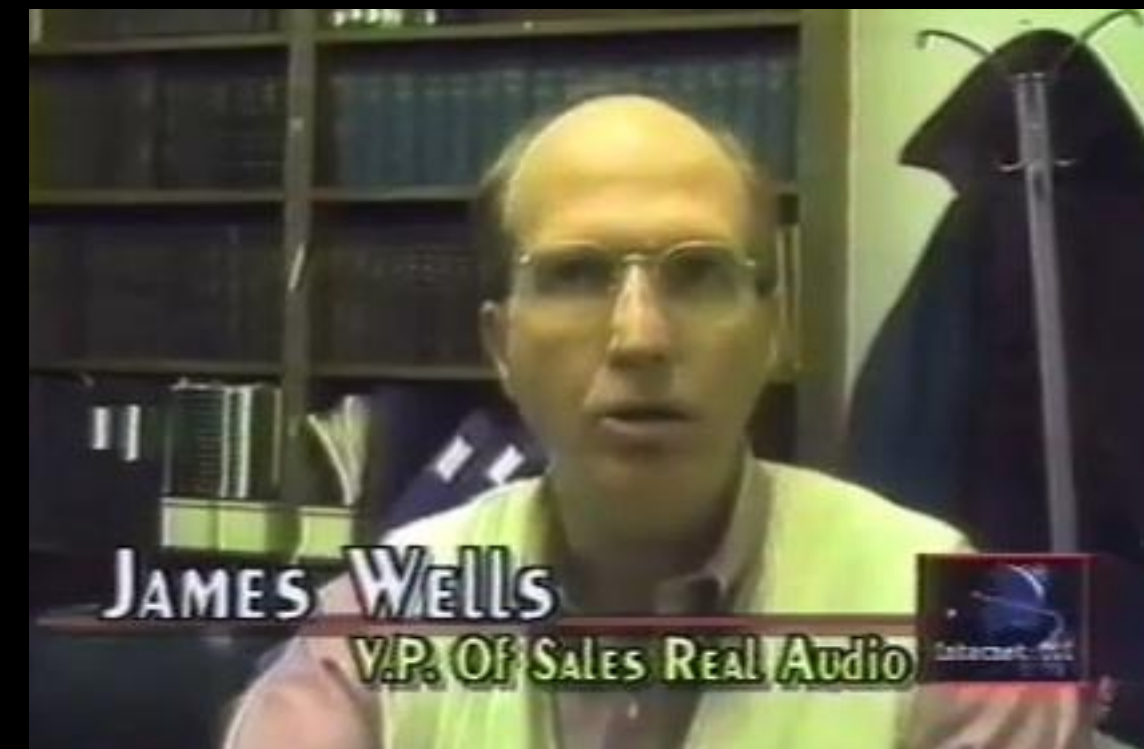
Internet: TCI



Nuthin' But Net





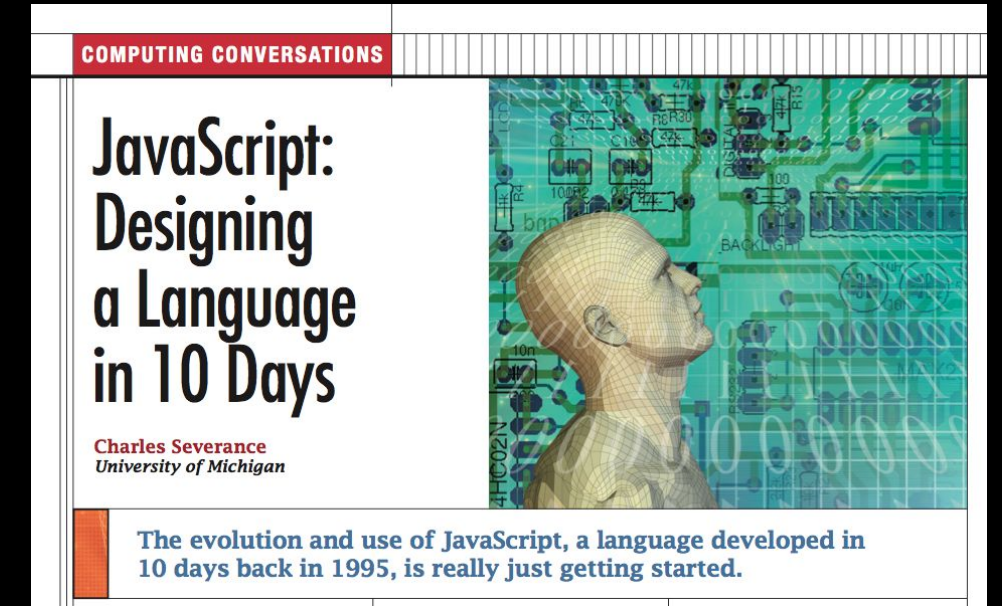


1995 - Internet:TCI  
Charles Severance / Richard Wiggins  
<https://vimeo.com/4275919>



# IEEE Computer Magazine


- I write a monthly column for IEEE Computer magazine called "Computing Conversations"
- There is a video interview for each article
- IEEE Computer Society has given permission to use the articles for free in this course
- [www.computer.org](http://www.computer.org) (Thanks!)  
<http://www.computer.org/portal/web/computingnow/computing-conversations>




Introduction to the Internet - Online Lecture - Microsoft Internet Explorer

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Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen Mail Print Edit

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Find  
A Cool Internet Lecture

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First Back Next Slide Audio

1996

The **File** menu allows you to select an existing lecture, create a new lecture or exit the program.

Done My Computer

<http://www.syncomat.com/>



1999

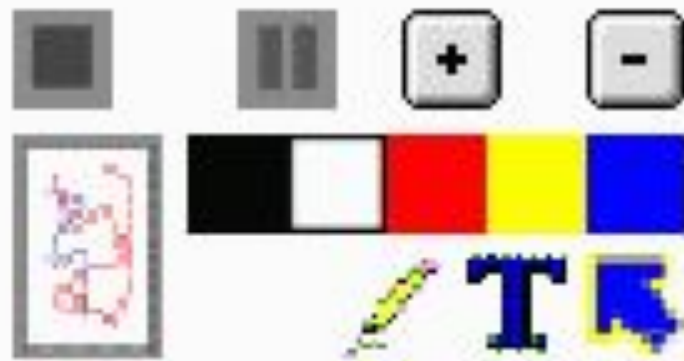
## Why Food?

- Food is an Interesting Topic
- Important Connection between food and productivity
- Although coffee is good too

FOOD



Productivity





1996



Fifteen years later...

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**Internet History, Technology, and Security**  
Charles Severance  
What is the Internet? How was it created? How does it work?

You are signed up

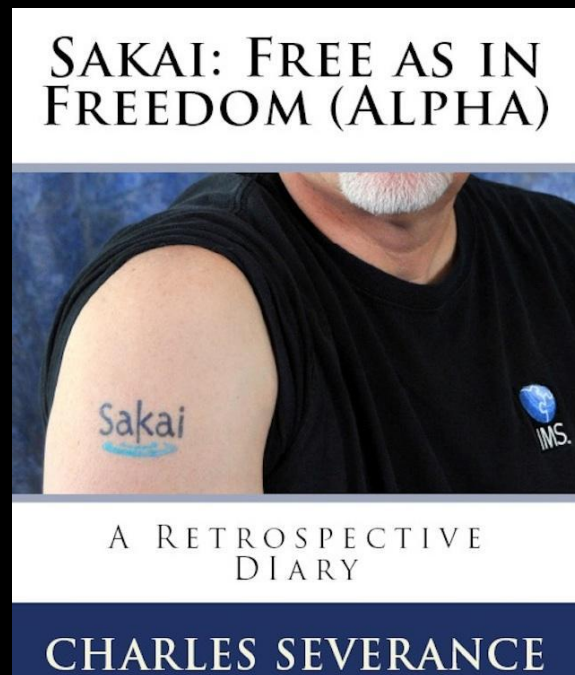
**About the Course**  
The impact of technology and networks on our lives, culture, and society continues to increase. The very fact that you can take this course from anywhere in the world requires a technological infrastructure that was designed, engineered, and built over the past sixty years. To function in an information-centric world, we need to understand the workings of network technology. This course will open up the Internet and show you how it was created, who created it and how it works. Along the way we will meet many of the innovators who developed the Internet and Web technologies that we use today.

**Course Audience**  
This course has no prerequisites and there will be no programming. Literally anyone can and everyone should take this course.

**What You Will Learn**  
After this course you will not take the Internet and Web for granted. You will be better informed about important technological issues currently facing



Dr. Chuck  
Twitter: @drchuck  
www.dr-chuck.com





# iPad Steering Wheel Mount

## PRODUCT DEMONSTRATION

“... the iPad Steering Wheel Mount is the "must-have" iPad accessory for anyone who spends significant time behind the wheel of an automobile. -- Stanley Milgram

The Apple iPad is the ideal automotive communications and entertainment device. The iPad is sized perfectly to mount using the iPad Steering Wheel Mount without obscuring the driver's view.



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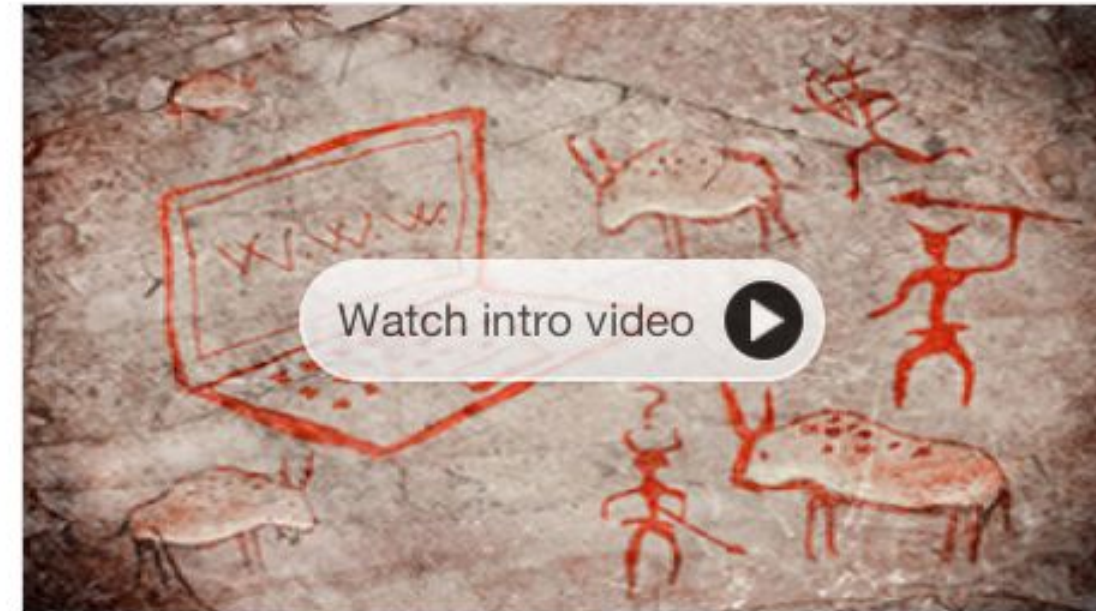




# Internet History, Technology, and Security

Charles Severance

What is the Internet? How was it created? How does it work?



**Workload:** 3-5 hours/week

1,139

1.5k

6.2k

Tweet

+1

Like

## About the Course

The impact of technology and networks on our lives, culture, and society continues to increase. The very fact that you can take this course from anywhere in the world requires a technological infrastructure that was designed, engineered, and built over the past sixty years. To function in an information-centric world, we need to understand the workings of network technology. This course will open up the Internet and show you how it was created, who created it and how it works. Along the way we will meet many of the innovators who developed the Internet and Web technologies that we use today.

## About the Instructor



**Charles Severance**  
University of Michigan

# Course Overview



# About this Material

- This is part of a course at the University of Michigan School of Information
- SI502: Networked Computing: Storage, Communication, and Processing
- [www.pythonlearn.com](http://www.pythonlearn.com) - Lectures slides, audio, open book
- Internet History, Technology, and Security is taught between chapters 11 and 12

# Goal: Be an Introductory Course

- We need low-stakes "pre-requisite" courses in Coursera
  - How to behave
  - How to use the software
  - How to write
  - Learn to use MOOC software
  - How to learn from others and help others learn



# Be an Open Learning Community

- Open Source works well when there is a "Benevolent Dictator"
- There needs to be real and enforced rules - but as few as possible
- Those in power must not hide behind their power and must share their power with those who show the right behavior
- Must make valued behaviors "infectious" / "amplified"







# Lectures

- Lecture Notes - PDF / Print / PowerPoint
- My slides are CC-BY so you can use them in your own teaching
- Most of the videos are up on YouTube
- Some videos have IEEE Articles with them - these remain Copyright IEEE



# Schedule Notes

- See the Syllabus for the course duration and topic outline
- I am expecting you to invest a minimum of 3-4 focused hours per week to watch lectures, think and reflect, and take assessments
- I want to make it so that folks can still join during the first two weeks and earn a certificate but
- At some point I **will** shut down new enrollment (archives are open)

Final Exam
Peer Assessments
Video Lectures
Resources Wiki (Editable)
Discussion Forums
Instructor Page
Help with Subtitles
Course Wiki 
Join a Meetup 
 Instructor Support
 I18N Editor

Sub-forum	Latest Activity
<b>General Discussion</b> General discussion about the course, life and everything under the sun.	N/A
<b>Lectures</b> Questions / Comments / Discussion around the lectures and video materials	N/A
<b>Discussing Peer Assignments and Other Writing</b> This is a place to publish writing that either is a particularly good peer-graded answer or even additional mini-essays that expand on the material in the course.	N/A
<b>Additional Resources</b> If you find materials that help to support the lectures please share them here	N/A
<b>Assignments</b> Specific questions regarding the assignments.	N/A
<b>Study Groups</b> Find friends and arrange meet ups!	N/A
<b>Instructional Staff Questions</b> Vote up important questions. We will try to get these as time permits.	N/A
<b>Platform Feedback</b> Please use this to post technical problems with the content or software	N/A



n=4701

Location

Copyright 2012, Charles Severance, CC-BY

<http://www.dr-chuck.com/coursera/insidetheinternet/2012-001/maps/where.html>





New York NY, Los Angeles, Ann  
Arbor MI, Wilmington, NC, Chicago,  
Washington, DC, Memphis, TN,  
Seattle WA, Seoul, Barcelona,  
London, Amsterdam  
Manila

<http://www.youtube.com/watch?v=R6zIQZcM72o>



# Assessments

- The in-video questions do not count
- One quiz per week - mostly multiple-choice style questions that randomize and you can retake and keep the highest score (10 points)
- Final exam
- Peer graded writing assignments (10 points each) - Extra Credit

# Peer Grading

- All peer-graded material is **extra credit** for the course - **you do not have to participate** in the peer graded assignments to earn a certificate
- Your peers *\*will\** determine your grade on the assignments - **no appeals**
- Write your submissions with this in mind....



# Course Scoring

- A course percentage above 75% will earn a certificate
- If you really want a certificate don't do the minimum to get to 75%
- There will be no individual arrangements / regrades / point appeals

$$\text{total\_assn} + \text{exam} + \text{total\_extra}$$

---

$$\text{total\_assn} + \text{exam}$$

$$(7 * 10) + 30 + (3 * 10)$$

---

$$(7 * 10) + 30$$

# Certificates

- See the syllabus for the details
- I don't like two levels of certificate because performance is too often correlated with skill level prior to course entry.

OCTOBER 13, 2012

## Statement of Accomplishment

Student Name

HAS SUCCESSFULLY COMPLETED THE UNIVERSITY OF MICHIGAN'S ONLINE OFFERING OF



### Internet History, Technology, and Security

This course examined how the Internet and World-Wide-Web came to be, starting from the emergence of electronic digital technology in World War II to the present-day Internet. This certificate is for the first time the course was ever taught from July through October 2012.

CHARLES SEVERANCE  
CLINICAL ASSISTANT PROFESSOR,  
SCHOOL OF INFORMATION  
UNIVERSITY OF MICHIGAN

PLEASE NOTE: THE ONLINE OFFERING OF THIS CLASS DOES NOT REFLECT THE ENTIRE CURRICULUM OFFERED TO STUDENTS ENROLLED AT THE UNIVERSITY OF MICHIGAN. THIS STATEMENT DOES NOT AFFIRM THAT THIS STUDENT WAS ENROLLED AS A STUDENT AT THE UNIVERSITY OF MICHIGAN IN ANY WAY. IT DOES NOT CONFER A UNIVERSITY OF MICHIGAN GRADE; IT DOES NOT CONFER UNIVERSITY OF MICHIGAN CREDIT; IT DOES NOT CONFER A UNIVERSITY OF MICHIGAN DEGREE; AND IT DOES NOT VERIFY THE IDENTITY OF THE STUDENT.

# Getting and Giving Help

- The answer to most questions like this will be "use the forums"
- With thousands of students in a class - other students will be the best source of answers (21 minute average response time in one course)
- Feel free to ask each other questions about the quizzes and the questions on the quizzes - the purpose of quizzes is to \*learn\* not to judge you



# Plagiarism

- **Plagiarism** is about using material copied and pasted from sources **without attribution** and representing it as your own
- In this course it typically comes up on the peer-graded assignments
- Peer graders will take points off as follows (10 point assignment)
  - A portion of the answer was text from another source without attribution (-5)
  - The entire essay was taken from another source (-10)

# Honor Code

- The final exam is to be taken according to the Honor Code:
  - "You are agreeing to take this examination on your own, without asking anyone for help. You will not discuss the questions or your answers on this examination with anyone other than the course instructor or grader."
- I will try to be clear when I am applying the honor code in each assessment
- For quizzes, you should take the quiz without help, but you can discuss the questions in the forum.

# Contacting Dr. Chuck

- It is not practical for me to interact individually with a class with thousands of students
- I and others will be monitoring the forums - if there is a problem and lots of students hit the same problem it will bubble up in the forums and get attention
- You can follow me on twitter @drchuck
- I may do Google Hangouts or mini-lectures if something pops up



# Bring Your Friends!



- Watch the first week's lecture and if you like it - get your friends to join - the more the merrier and forming a study group will be easier!
- The first video from Bletchley Park is longer than most (25 minutes) - the rest will be shorter
- They should be able to earn a certificate (if that is what they are going for) adding during the first two weeks



Charles Severance  
Edit Profile

## FAVORITES

- News Feed
- Messages 3
- Events
- Photos
- Find Friends

## ADS

- Ads Manager

## PAGES

- Pythonlearn
- The Apereo Foundation
- Pages Feed 20+
- Like Pages 12

## GROUPS

- Internet Technology and Security(UMich - Coursera)
- Online Dr-Chuck: Python
- Create Group...

## APPS

- App Center
- Gifts
- Games Feed 20+

## DEVELOPER

- wiscrowd
- Create App...

## MORE ▾



## Internet Technology and Security(UMich - Coursera)

About

Events

Photos

Files

Notifications



Write Post



Add Photo / Video



Ask Question



Add File

Write something...

591 members (1 new) · Invite by Email

[+ Add People to Group](#)

## PINNED POSTS



Tan Lee Ling

Should we use this group for second iteration of IHTS?



I'm ok with that.



+17



No, there should be a new group for each iteration.



+2

Like · Comment · Follow Post · Friday at 10:25am

## RECENT POSTS



Charles Severance

Hi All – I am preparing the welcome lecture of the second iteration of IHTS. Should I mention this Facebook Group? Or should there be a group for each time the course is taught?

Like · Comment · Unfollow Post · Friday at 9:41am



Tan Lee Ling Dr Chuck, I made a poll to let group members vote for it. But it seems many members are not active now, I'm not sure how many people will see that. I'm ok with that whether you mention this group or create a new group. 😊

Friday at 10:36am · Like



Mehreen Tahir Having the same group for every time the course is taught sounds like a good idea. Up to you I suppose



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The goal of this site is to provide a set of materials in support of my [Python for Informatics: Exploring Information](#) book to allow you to learn Python on your own. This page serves as an outline of the materials to support the textbook.

You can download the exercises, audio, and video lectures to your local computer so you can play them locally. This can be done with either a Right-Click or a Control-Click in most browsers.

- Welcome Lecture - ([YouTube](#), [Download MP4](#))
- Get your copy of the [Python for Informatics: Exploring Information](#).
- Install the appropriate version of Python and a text editor for your system following [these instructions](#).
- Chapter 1 - Why program? [Video Lecture](#), [Slides](#), [Printable Slides](#), [PowerPoint](#), [Lecture Audio](#))
- Play with the [Auto-grader](#) and write a "hello world" program.
- Chapter 2 - Variables, expressions, and statements ([Slides](#), [Printable Slides](#), [PowerPoint](#), [Streaming Video](#), [Download Video](#), [Lecture Audio](#))
  - Worked Exercise Screenshots: [2.2](#), [2.3](#) (suggest download)

## Find us on Facebook



Pythonlearn

✓ Like You like this.

You and 372 others like Pythonlearn.



# Please Help!

- Doing this is very cool but still evolving
- This is social - you are an important part of the learning
- It is as much about learning how to work together to learn at scale as it is about "History, Technology, and Security"
- Help each other learn the material and make suggestions for improvement

# Copyright Thanks

- Thanks to IEEE Computer for permission to use IEEE Computer magazine articles associated with the videos
- Thanks to Richard Wiggins for the use of his video material
- Thanks to Dave Malicke and Open Michigan ([open.umich.edu](http://open.umich.edu)) for help with copyright review of these materials

# Open Content

- My slides and my lecture videos (feel free to download and retain) are Creative Commons Attribution
- I encourage and am honored if you would reuse / remix in any way you like

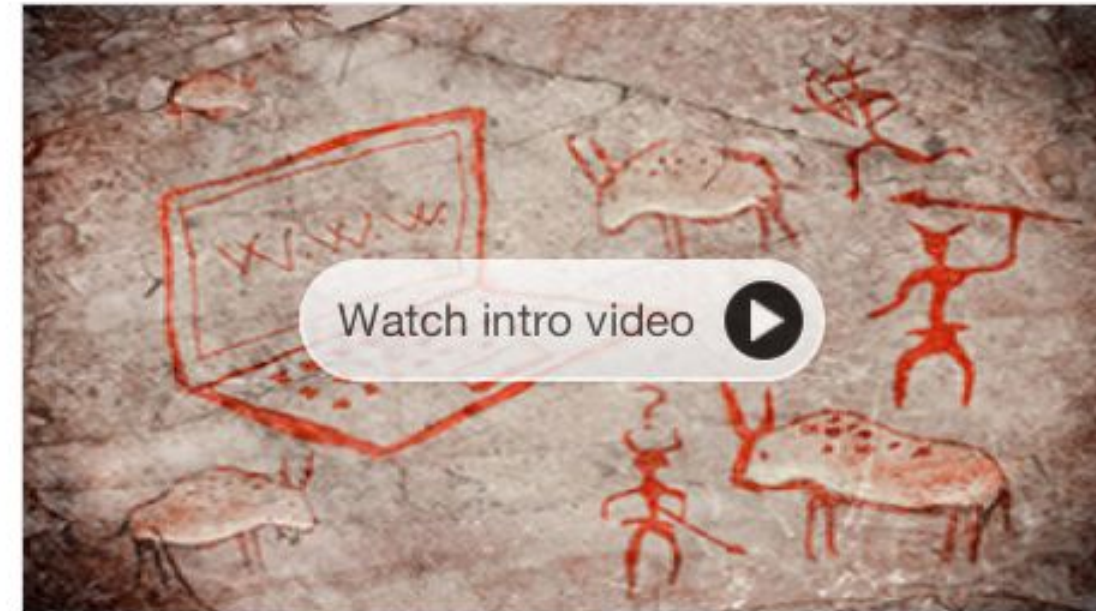




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