



7 BILLION PEOPLE

200 COUNTRIES

ALL PRODUCING DATA

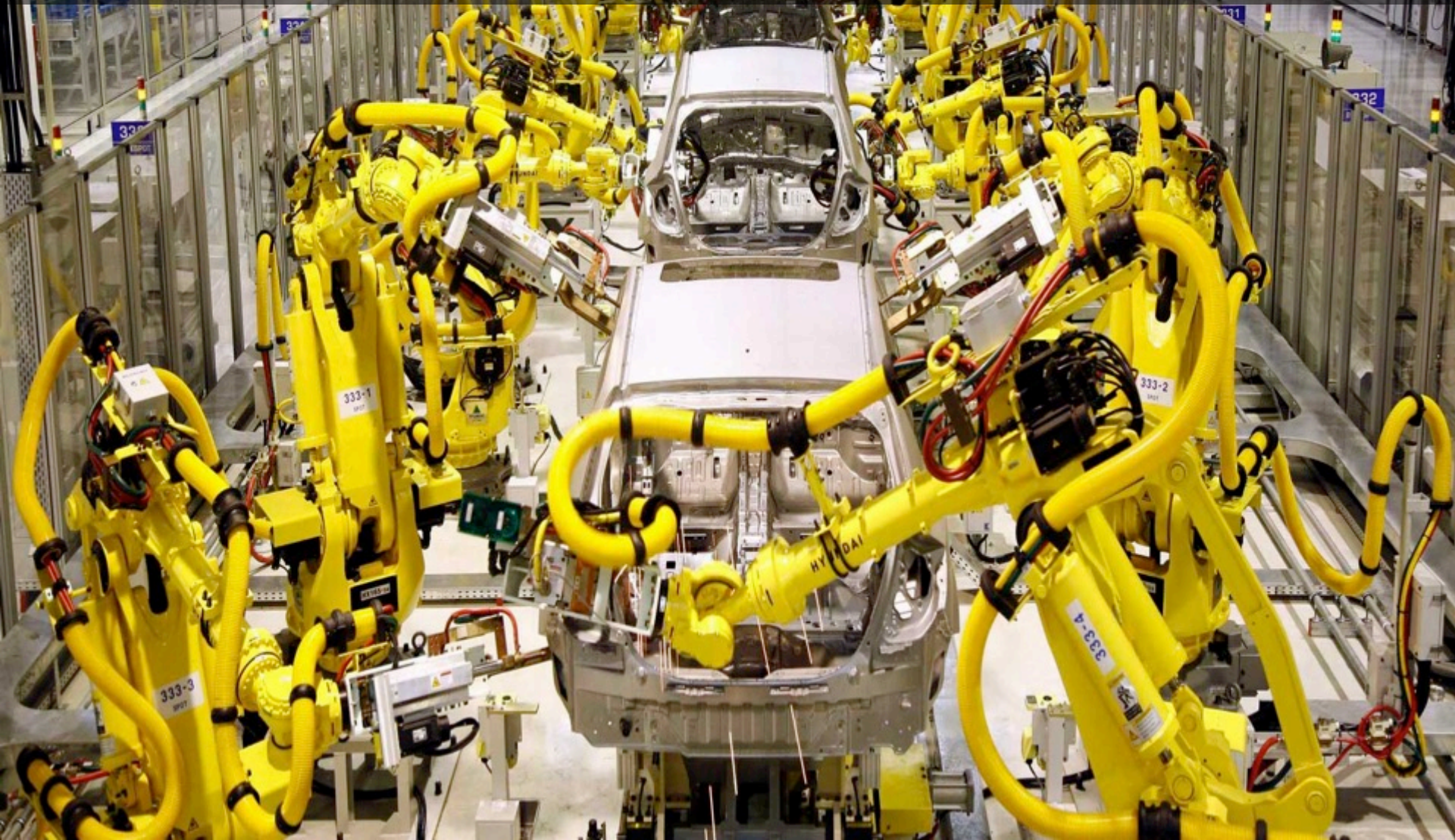
Engineering Computation
& Data Science

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Rise of Systems & Data



More Systems & More Data





 **STORM ADVISORY**
5 HRS
REMAINING

12 PM	1 PM	2 PM	3 PM	4 PM
73°	72°	68°	63°	62°


STORM DIRECTION

 4" EXPECTED RAINFALL

Everywhere



Abstractions for Building Software Systems Have Risen

A person wearing a white helmet, dark jacket, and orange gloves is walking on a snowy mountain peak. The background shows a vast, rugged mountain landscape under a cloudy sky. The text is overlaid on a semi-transparent dark band across the middle of the image.

New normal: A Single Person can
Build a Complex Software System



New normal: A Small Team can
Challenge an Industry

Cloud
Computation

Data
Science

IIOT

Machine
Learning

PILLARS



WEB



DEVICES



DATASCIENCE



SECURITY



COMPUTATION



VISUALIZATION



MACHINE LEARNING



CLOUD

1.00 Engineering Computation & Data Science

John R. Williams, Abel Sanchez, Lecture: MWF 9:30-11 (1-390)

[Home](#)[Lectures](#)[Homeworks](#)[Labs](#)[Videos](#)[About](#)

Engineering Computation and Data Science

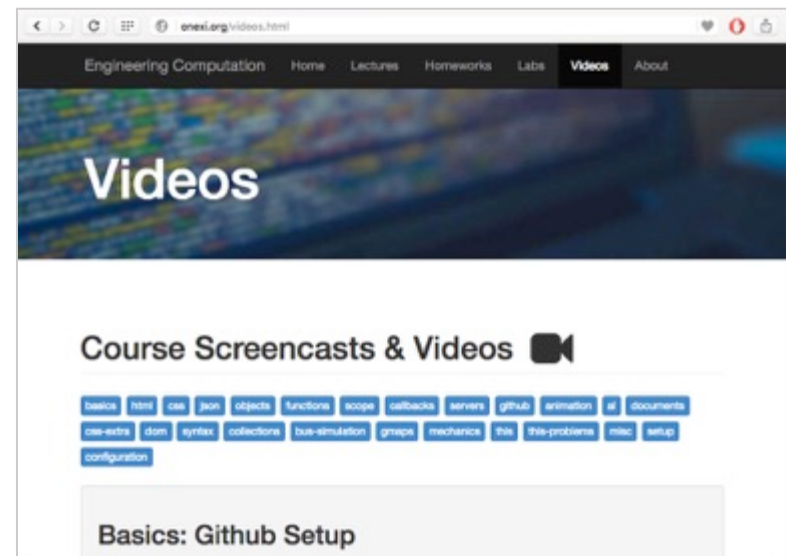
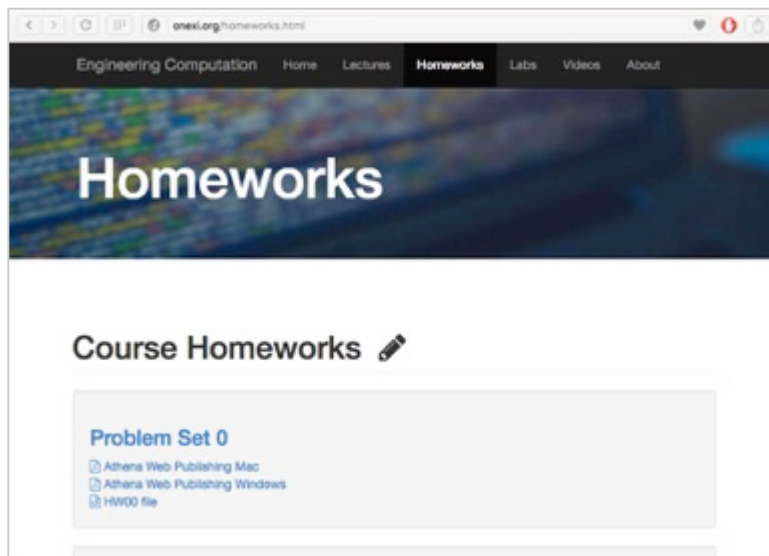
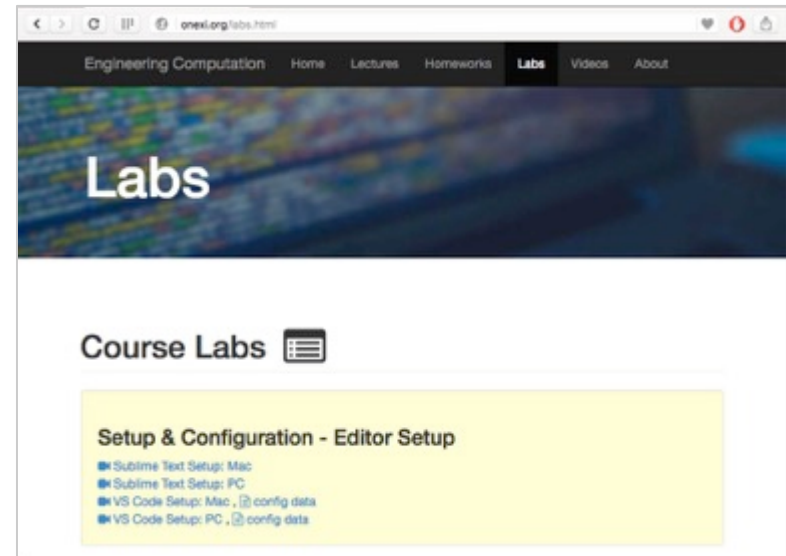
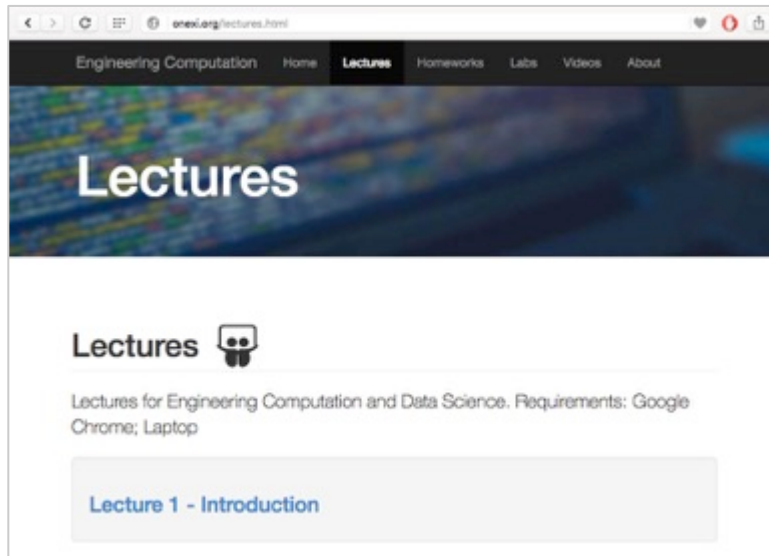
Introduces the fundamentals of computational thinking and data science in engineering computation.

[Learn more](#)

Requires Google Chrome, Course by Abel Sanchez and John Williams

<http://onexi.org>

All Content Online, <http://onexi.org>



Class Template

Class Prep



Mini Lectures



Active Learning





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