Schedule

Lecture 8. AWS & Visualization (today)

Lecture 9. Proposal Presentation (next week)

Lecture 10. Data Labeling & Feature Selection (next next week)

JIANNAN WANG - CMPT 733

Lecture 8-1: Introduction to AWS

CMPT 733, SPRING 2017

JIANNAN WANG

Amazon

From Wikipedia 2006

Article Talk Head Article Talk Head Amazon.com (NASDAQ: AMZN @) is an American electronic commerce company based in Seattle, Washington. It was one of the

From Wikipedia 2016

Amazon.com

From Wikipedia, the free encyclopedia

Further information: Timeline of Amazon

Amazon.com, Inc. (/ @məzon/ or / @məzən/), often referred to as simply Amazon, is an American electronic commerce and cloud computing company with headquarters in Seattle, Washington. It is the

JIANNAN WANG - CMPT 733

What is Cloud Computing?

The buzz word before "Big Data"

- Larry Ellison's response in 2009
- Berkeley RADLab's paper in 2009

A technical point of view

 Internet-based computing (i.e., computers attached to network)

A business-model point of view

Pay-as-you-go (i.e., rental)



Three Types of Cloud Computing



How does AWS fit into the picture?

laaS

- EC2, S3, ...
- *<u>Highlight</u>*: EC2 and S3 are two of the earliest products in AWS

PaaS

- Aurora, Redshift, ...
- <u>Highlight</u>: Aurora and Redshift are two of the fastest growing products in AWS

SaaS

- WorkDocs, WorkMail
- *<u>Highlight:</u>* May not be the main focus of AWS

Why does AWS succeed?

Starting from IaaS (i.e., S3 and EC2) is the key

 Although there are many SaaS and PaaS companies before AWS, in most of the time, people still want to have a full control of computing resources

10-100 less expensive than alternatives (2006)

 Apply the existing *unused* resources (that are for Amazon.com) to cloud computing

The speed of provisioning is really fast

Similar to "1-click buy"

Summary

Big Picture

- Cloud Computing
- SaaS, PaaS, and IaaS

AWS

• Putting AWS into the big picture

• Why does AWS succeed?

Assignment 8

Part 1: Amazon Web Services (AWS)

- Task A.1: Launching an Amazon EC2 Instance
- Task A.2 : Running an iPython Notebook Server on EC2
- Task A.3: Transferring Files between S3 and Local Machine
- Where To Go From Here (Optional)

Deadline: 11:59pm, Mar 12th http://tiny.cc/cmpt733-a8

JIANNAN WANG - CMPT 733