2019-11-12 and 2019-11-13 AWS Training

- Containers in AWS - ECS, EKS
  - Agenda
  - Materials
- AI/ML Services in AWS
  - Agenda
  - Materials

Containers in AWS - ECS, EKS

- Date: Tuesday Nov. 12, 2019
- Location: Stone Classroom, Mann Library (https://mannlib.cornell.edu/use/spaces/all/stone-classroom)
- Cost: $0
- Register: https://cornell.qualtrics.com/jfe/form/SV_dckdOaEJO9fWYkd
- Bring:
  - Your own laptop might be easier to use, but there are also workstations in the training room.
  - Your own lunch/snacks
- Limit: 27 students
- Zoom/Remote Option: No
- CIT Hosts: Ned La Celle, Sean D. Walsh
  - AWS SA : Anel Perez

### Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM – 9:15 AM</td>
<td>Welcome and Introductions</td>
<td></td>
</tr>
<tr>
<td>9:15 AM – 10:00 AM</td>
<td>Module 1: Introduction to Containers</td>
<td>This module is focused on introducing what are containers, their benefits and the services offered by AWS for Containers.</td>
</tr>
<tr>
<td>10:00 AM – 10:30 AM</td>
<td>Module 2: Amazon ECS Lab</td>
<td>In this lab, participants will deploy a Cluster in ECS and deploy a basic web application</td>
</tr>
<tr>
<td>10:30 AM – 10:45 AM</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>10:45 AM – 11:15 AM</td>
<td>Module 3: Containers Deep Dive</td>
<td>This module will focus on the different configuration options that are available with ECS/EKS (e.g. networking modes, placement groups, running services).</td>
</tr>
<tr>
<td>11:15 AM – 12:00 PM</td>
<td>Module 4: Amazon ECS + ECR Deep Dive Lab</td>
<td>Within this lab, participants will create their own image and store it within ECR. Also, provision ECS instances and define various parameters within their cluster.</td>
</tr>
<tr>
<td>12:00 PM – 1:00 PM</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>1:00 PM – 1:30 PM</td>
<td>Module 5: CI/CD and DevOps Practices on AWS</td>
<td>The focus will be to provide an overview of CI/CD pipelines and the services that AWS offers for them. There will also be an overview of DevOps principles and how to approach them on AWS.</td>
</tr>
<tr>
<td>1:30 PM – 2:00 PM</td>
<td>Q+A, Close Out</td>
<td></td>
</tr>
</tbody>
</table>

### Materials

- Module 2 - Getting Started with Docker and ECR Lab.docx
- Module 4 - Getting Started with ECS.docx
- BOX Folder with Slides : https://cornell.box.com/v/AWS-ECS-EKS-TrainingSlides
CU TRAINING AWS account has been cleaned up (2019-11-13) of any ECS ECR lab related resources (VPCs, Clusters, Loadbalancers, Instances, IAM Roles) - NL85

AI/ML Services in AWS

- Date: Wednesday Nov. 13, 2019
- Location: Stone Classroom, Mann Library (https://mannlib.cornell.edu/use/spaces/all/stone-classroom)
- Cost: $0
- Register: https://cornell.qualtrics.com/jfe/form/SV_dckdOaEJO9fWYkd
- Bring:
  - Your own laptop might be easier to use, but there are also workstations in the training room.
  - Your own lunch/snacks
- Limit: 27 students
- Zoom/Remote Option: No
- CIT Host: Marty Sullivan

Agenda

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<tr>
<td>9:00 AM – 9:15 AM</td>
<td>Welcome and Introductions</td>
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<tr>
<td>9:15 AM – 10:00 AM</td>
<td>Module 1: Introduction to AI/ML Services in AWS</td>
<td>The goal of this module is to provide an overview and introduction to AI/ML services that are currently offered by AWS.</td>
</tr>
<tr>
<td>10:00 AM – 11:00 AM</td>
<td>Module 2: Amazon Lex Lab</td>
<td>Within this lab, participants will have the opportunity to create a Chatbot leveraging Amazon Lex.</td>
</tr>
<tr>
<td>11:00 AM – 11:15 AM</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>11:15 AM – 12:00 AM</td>
<td>Module 3: Deep Dive into Amazon Rekognition + Demo</td>
<td>We will be review the Amazon Rekognition service in greater detail and demonstrating a demo leveraging AWS DeepLens.</td>
</tr>
<tr>
<td>12:00PM – 1:00 PM</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>1:00 PM – 1:30 PM</td>
<td>Module 4: Deep Dive into Amazon SageMaker</td>
<td>In this module, we will be diving deeper into what is Amazon SageMaker and potential use cases for it.</td>
</tr>
<tr>
<td>1:30 PM – 2:00 PM</td>
<td>Module 5: Amazon SageMaker Lab</td>
<td>Within this lab, participants will create a Jupyter Notebook leveraging Amazon SageMaker and build a recommendation engine.</td>
</tr>
</tbody>
</table>

Materials

- Amazon Lex Lab: Module 2 - Lex Chatbot Lab.docx
- Presentation: https://cornell.box.com/s/l2ywhml14h36b6qzkvbam1n8xveg2oq