



Amazon Web Services (AWS) and Massive Open Online Courses (MOOC)

Tsung Teng Chen National Taipei University

Major MOOCs Platforms



- Coursera
 - 6 courses offered by AWS (Google Cloud 25)
- Edx
 - 8 courses offered by AWS
- Udacity
 - 1 course offered by AWS DeepRacer
 - 2 Nano-Degree offered by AWS & Kaggle
 - 2 AWS related Nano-Degree offered by others



Coursera AWS Courses



- AWS Fundamentals:
 - Going Cloud-Native
 - Migrating to the Cloud *
 - Building Serverless Applications
 - Addressing Security Risk
- Getting Started with AWS Machine Learning *
- AWS Computer Vision:
 - Getting Started with CluonCV

^{*}Intermediate courses

Going Cloud-Native



- Introduction, Infrastructure, and Compute
 - AWS Overview, AWS Infrastructure, AWS Compute Services, EC2, Lightsail
- Networking and Storage on AWS
 - AWS VPC, Storage EBS, S3, EFS
- Databases on AWS
 - AWS RDS, DynamoDB
- Monitoring and Scaling
 - Monitoring (CloudWatch), Load Balancing, Auto Scaling
- Security, Cost Management

Getting Started with AWS Machine Learning



- Introduction to Machine Learning
- The Machine Learning Process
 - Mapping business problems to ML solutions
- Amazon Al Services: Computer Vision
 - Rekognition, DeepLens
- Amazon Al Services: NLP
 - Comprehend, Translate, Transcribe
- Introduction to Amazon SageMaker
 - SageMaker GroundTrush Neo Notebook

AWS Rekognition





Rekognition Celebrity Recognition





AWS NLP



Entities

Key phrases

Language

Sentiment

Syntax

Analyzed text

即將在年底上映的功夫電影《葉問四》,從十一年前開拍第一集,再創華語功夫片高峰;很多人不知道,《葉問》的催生者,香港著名的電影編劇家、演員及出品人黃百鳴,他也是港片四十年來最重要的推手之一,被稱為香港電影的「活化石」。《葉問》捧紅了甄子丹,但如果沒有他的慧眼,沒有今天的甄子丹;沒有他的識英雄,將沒沒無聞的一代宗師葉問搬上銀幕,就不會有締造十年傳奇的《葉問》系列電影問世。

Udacity AWS DeepRacer



- DeepRacer Vehicle (hardware)
- DeepRacer Online Platform
- Reinforcement Learning
 - Agents, actions, environments, states, rewards
- DeepRacer Model Tuning
 - Parameters, hyperparameters, reward functions
- Model Deployment onto DeepRacer Vehicle
- DeepRacer League
 - Compete Online

edX AWS courses



- AWS Developer:
 - Building on AWS, Deploying on AWS, Optimizing on AWS
- AWS: Getting Started with Cloud Security
- AWS IoT: Developing and Deploying an Internet of Things
- Building Containerized Applications on AWS
- Amazon DynamoDB: Building NoSQL Database-Driven Applications
- Amazon SageMaker: Simplifying Machine Learning Application Development





Thank you and Questions?