From Distributed Systems to Deep Learning: Lessons learnt in building large scale cloud services

In AWS, we are running large scale cloud services that are the core platform for Amazon.com and millions of AWS customers. Building and operating these systems at scale has taught us several lessons and best practices: 1, how does one determine what they are building is right for their customer 2, how does one architect for scale and ensure correctness, 3, how does one test these large scale systems and 4, how do you deploy systems globally, etc.? Throughout this presentation, I will talk through these learnings as they apply to various systems I have built (such as DynamoDB, Paxos based systems, AI services like Rekognition). We will finish the talk with discussion on how AWS is exposing AI technologies to our customers to drive the development of cutting edge technology solutions.