



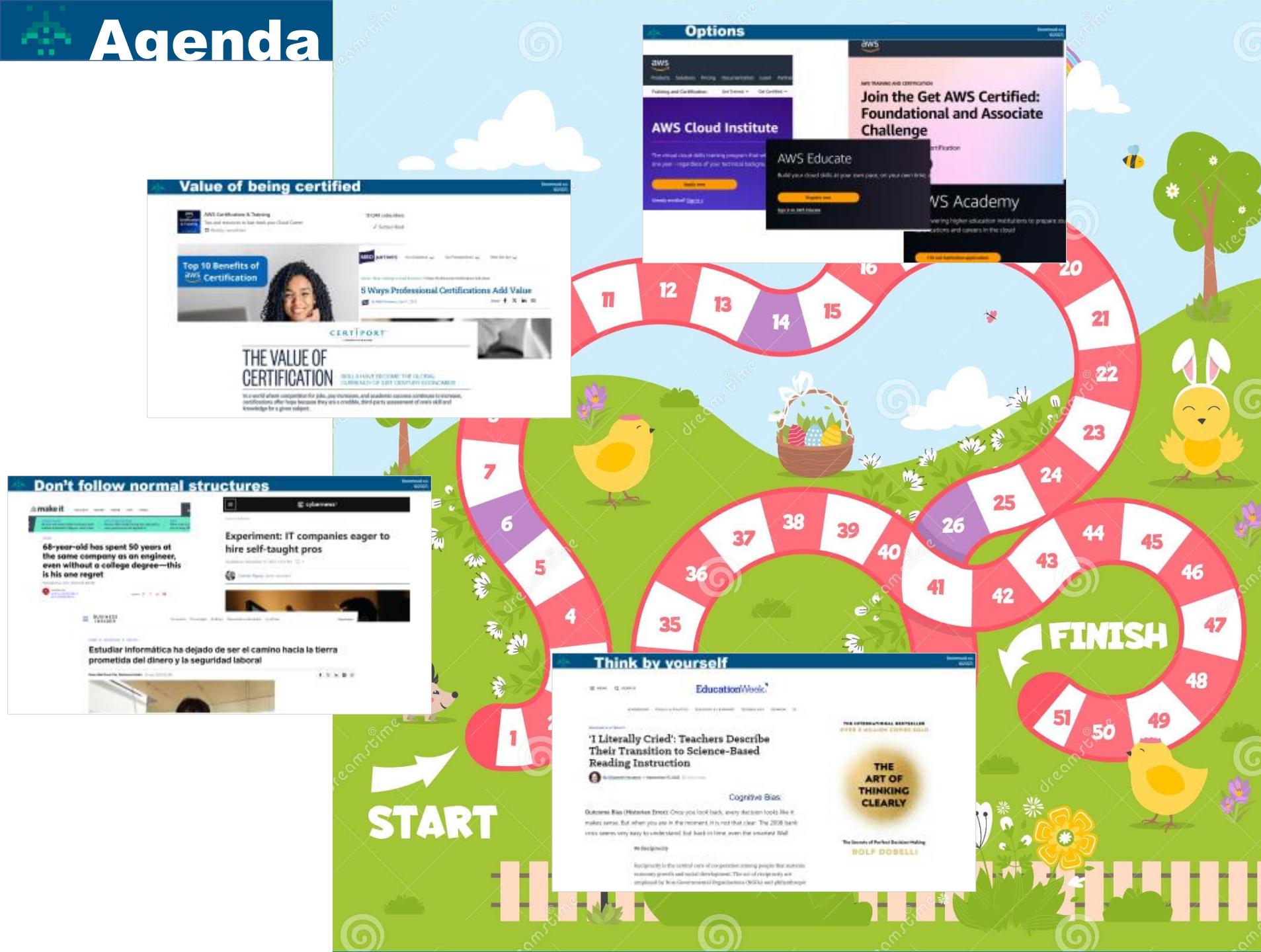
Personal Ideas

AWS Advanced Architecting

Francisco Moreno

December/2025

Agenda



Don't follow normal structures

make it

SUCCESS MONEY WORK LIFE VIDEO

CLOSING THE GAP 29-year-old makes \$125K working in tech without a bachelor's degree—here's how

POP CULTURE AND MEDIA Oscars 2024: Greta Gerwig was rejected by every grad school she applied to

WORK Want a job or pro way to brag, Wh

WORK

68-year-old has spent 50 years at the same company as an engineer, even without a college degree—this is his one regret

Published Sun, Oct 1 2023 9:30 AM EDT

Jennifer Liu
@IN/JLJENNIFERLIU
@JLJENNIFERLIU

SHARE f X in e

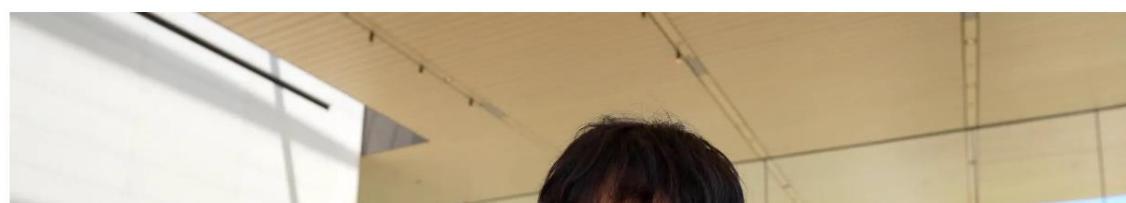
BUSINESS INSIDER

Economía Tecnología Política Desarrollo profesional Lo último

HOME > ESTRATEGIA > EMPLEO

Estudiar informática ha dejado de ser el camino hacia la tierra prometida del dinero y la seguridad laboral

Kwan Wei Kevin Tan, Business Insider 23 nov. 2023 23:30h.



cybernews®

Home > Editorial

Experiment: IT companies eager to hire self-taught pros

Updated on: November 15, 2023 12:53 PM 1

Ernestas Naprys, Senior Journalist

Newsletters



Value of being certified



AWS Certification & Training

Tips and resources to fast-track your Cloud Career

✉ Weekly newsletter

151,049 subscribers

✓ Subscribed



Top 10 Benefits of aws Certification

CERTIPORT
A PEARSON VUE BUSINESS

THE VALUE OF CERTIFICATION

SKILLS HAVE BECOME THE GLOBAL CURRENCY OF 21ST CENTURY ECONOMIES!

In a world where competition for jobs, pay increases, and academic success continues to increase, certifications offer hope because they are a credible, third-party assessment of one's skill and knowledge for a given subject.



MBO partners®

Our Solutions ▾

Our Perspectives ▾

Who We Are ▾

Home > Blog > Manage a Small Business > 5 Ways Professional Certifications Add Value

5 Ways Professional Certifications Add Value



By MBO Partners | April 1, 2022

Share [f](#) [X](#) [in](#) [✉](#)



Options



Products Solutions Pricing Documentation Learn Partner

Training and Certification

Get Trained ▾

Get Certified ▾

AWS Cloud Institute

The virtual cloud-skills training program that will take you from beginner to AWS certified in one year - regardless of your technical background.

[Apply now](#)

Already enrolled? [Sign in »](#)

AWS Educate

Build your cloud skills at your own pace, on your own time, and earn AWS certification.

[Register now](#)

[Sign in to AWS Educate](#)



AWS TRAINING AND CERTIFICATION

Join the Get AWS Certified: Foundational and Associate Challenge

certification

NVS Academy

owering higher education institutions to prepare students for careers in the cloud

[Fill out institution application](#)



Paradigms to be on cloud

THE NEW STACK

PODCASTS EBOOKS EVENTS NEWSLETTER
ARCHITECTURE ENGINEERING OPERATIONS

CLOUD NATIVE ECOSYSTEM / CLOUD SERVICES / FINOPS / HARDWARE / OPERATIONS

'Merchants of Complexity': Why 37Signals Abandoned the Cloud

Provisioning a fleet of servers in 30 minutes is magic, but it is not a requirement that comes up that often for most businesses, David Heinemeier Hansson argues.

Dec 26th, 2023 8:15am by [Joab Jackson](#)



★★★★★ "GETS BETTER AND BETTER"

Leaving the Cloud: Cloud Computing Isn't For Everyone

We've run extensively in both Amazon's cloud and Google's cloud,
but the savings never materialized. So we've left.

Introduction to AWS Economics

Reducing Costs and Complexity

May 2015

The screenshot shows the AWS Cloud Economics Center landing page. At the top, there is a navigation bar with the AWS logo and links for Products, Solutions, Pricing, Documentation, Learn, and Partner Network. Below the navigation bar, a large blue header banner features the text "Cloud Economics Center" and "Understand and optimize the value of AWS". At the bottom of the banner is a yellow "Get started" button.

Paradigms of using microservices


[Homepage](#) [Our Innovation](#) [Our People](#)
[Video Streaming](#)

Scaling up the Prime Video audio/video monitoring service and reducing costs by 90%

The move from a distributed microservices architecture to a monolith application helped achieve higher scale, resilience, and reduce costs.



Architecture Style : Modulith (vs Microservices)



Pier-Jean Malandrino · [Follow](#)

Published in Level Up Coding · 4 min read · Jan 28, 2024

DevOps.com
POWERED BY Techstrong Group

LATEST ▾ VIDEOS/PODCASTS ▾ WEBINARS ▾ LIBRARY EVENTS ▾ SPONSORED CONTENT RELATED SITES ▾ MEDIA KIT ABOUT

AI CLOUD CI/CD CONTINUOUS TESTING DATAOPS DEVSECOPS DEVOPS ONRAMP PLATFORM ENGINEERING SUSTAINABILITY

Hot Topics Object Maintainers Add Code Profiling Capabilities • Time to Extend DevOps Visibility to the Network Edge

Best of 2023: Don't Build Microservices, Pursue Loose Coupling

Best of 2023: Don't Build Microservices, Pursue Loose Coupling

BY: CHRIS BERTINATO ON DECEMBER 26, 2023

[Write](#) [Sign up](#)

Rebuilding Netflix Video Processing Pipeline with Microservices

Top highlight



Netflix Technology Blog · Follow

Published in Netflix TechBlog · 9 min read · Jan 10, 2024



Home > Blog > OpenTF Joins The Linux Foundation as OpenTofu!

OpenTF Joins The Linux Foundation as OpenTofu!



Omry Hay

env0 CTO & Co-founder, OpenTofu Steering Committee

The screenshot shows a DEV post interface. At the top, there's a navigation bar with 'DEV' and a search bar. Below it, a post by 'Lucas F. da Costa' is displayed, dated 29 Aug 2023. The post has 179 likes, 12 comments, 91 shares, and three other interaction metrics. The main content of the post is:

One staging for each engineer: introducing Layerform

#devops #infrastructureascode #terraform



≡ MENU Q SEARCH

LEADERSHIP POLICY & POLITICS TEACHING & LEARNING TECHNOLOGY OPINION JC

READING & LITERACY

'I Literally Cried': Teachers Describe Their Transition to Science-Based Reading Instruction



By [Elizabeth Heubeck](#) — September 15, 2023 6 min read

Cognitive Bias:

Outcome Bias (Historian Error): Once you look back, every decision looks like it makes sense. But when you are in the moment, it is not that clear. The 2008 bank crisis seems very easy to understand, but back in time, even the smartest Wall

#6 Reciprocity

Reciprocity is the central core of cooperation among people that sustains economy growth and social development. The act of reciprocity are employed by Non-Governmental Organizations (NGOs) and philanthropic

THE INTERNATIONAL BESTSELLER
OVER 3 MILLION COPIES SOLD

THE
ART OF
THINKING
CLEARLY

The Secrets of Perfect Decision-Making
ROLF DOBELLI

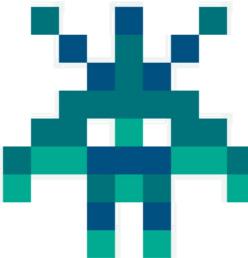


Instructor

- **Comms Engineer**, M.Sc., University of York, UK. **Electronic Engineer**, U Javeriana.
- {Enterprise, Solutions, Software} **Architect**, **DevOps Engineer**, **Low-Level Developer**.
- 16 years of working experience on massive transport, financial companies (Banks and **Transactional Platforms**) and software companies (Current).
- 20+ Cloud Certifications



/in/fmorenod - fmorenod@gmail.com





Time Periods

- **Schedule** your appointments: 5 sessions.
- Arrive early to check your connection. Bring your own questions from concepts or from labs.
- **No recording** is allowed, except extraordinary cases.
- **Raise your hand** or interrupt the class **if you have to**: I plan to asks every 2/3 slides.



Features

A course that "Identify (...) services, compare features, and explore best practices to architect resilient, secure, and highly available IT solutions on AWS."

- It is a course refined by thousands of students and hundreds of instructors over the years, focusing on the most widely used methods and services in the industry.
- A course does not guarantee that all the requested topics will be covered as there are many services for each exam – 6 pages for SAA, 5 for DAV and 7 for SAP.
- It is expected that there will be independent work on the part of the student to read the Whitepapers, documentation and FAQs.
- Labs contains required information to work as independent tasks, are not taught in class, and are handled by the AWS Platform. **HOWEVER**, the student requests to BSG to do it on class (to do at the end of the class)
- AWS recommends course length and cadence.





Classes Management: Automatic generated URL

aws training and certification

My account

My Classes > Architecting on AWS

Architecting on AWS

Labs

Labs will be made available by instructors

Lab Guide Student Guide

Lab 1 - Explore and interact with the AWS Management Console and AWS Command Line Interface

2 HOURS

This lab provides you with a basic overview of the AWS Management console and API



online.vitalsource.com/reader/books/200-ARCHIT-75-EN-LG-E/pageid/98

Architecting on AWS 7.5.5 (EN): Lab Guide

AWS Training and Certification

Contents

Lab 1: Exploring and Interacting with the AWS Management Console and AWS CLI	4
Lab 2: Building your Amazon VPC Infrastructure	19
Lab 3: Creating a Database Layer in Your Amazon VPC Infrastructure	52
Lab 4: Configuring High Availability in Your Amazon VPC	69
Lab 5: Building a Serverless Architecture	94

Lab Support

Almost all AWS courses have self-directed labs for the students.

The screenshot shows a web browser displaying the AWS Training and Certification page for the 'Architecting on AWS 7.5.5 (EN): Student Guide'. The page lists several modules with their respective counts:

- Module 8: Automation: 396
- Module 9: Containers: 428
- Module 10: Networking 2: 464
- Module 11: Serverless: 503
- Module 12: Edge Services**: 550
- Module 13: Backup and Recovery: 607
- Course Summary: 654

Below the module list is a diagram titled 'Edge services architecture' which illustrates the flow of traffic from an application through AWS services like Route 53, WAF, CloudFront, and Outposts to an on-premises environment. A note states: 'Review the edge services architecture. A user sends a request to an application partly hosted on premises. The user's request interacts with Amazon Route 53, AWS WAF, Amazon CloudFront, and AWS Outposts. The AWS services hosted in the cloud are protected with AWS Shield.'

Lab environment

You are tasked with evaluating and improving an event-driven architecture. Currently, Customer

Care professionals take snapshots of products a store the images. The development team runs P uploaded to the ingest S3 bucket. Uploading a fil notification to an Amazon SNS topic. Amazon S separate SQS queues. The initial design was to each resizing operation. After reviewing the initia instances with Lambda functions. The Lambda fi formats and store the output in a separate S3 bu effective.

The following diagram shows the workflow:



AWS Training and Certification

Lab 5: Building a Serverless Architecture

Start lab

1. To launch the lab, at the top of the page, choose Start lab.
2. You must wait for the provisioned AWS services to be ready before you can continue.
3. To open the lab, choose Open Console.

You are automatically signed in to the AWS Management Console in a new web browser tab.

⚠ Do not change the Region unless instructed.

Common sign-in errors

Error: You must first sign out

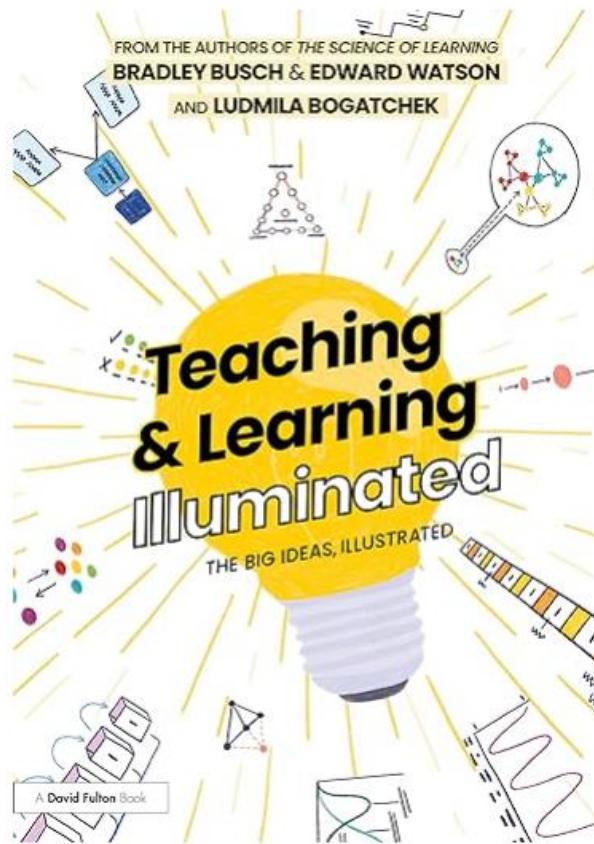
Amazon Web Services Sign In

You must first log out before logging into a different AWS account.

To logout, [click here](#)

If you see the message, **You must first log out before logging into a different AWS account:**

- Choose the [click here](#) link.



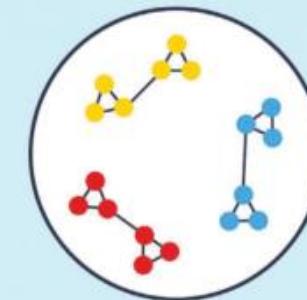
Working memory is very small

This means that we forget new information quickly.



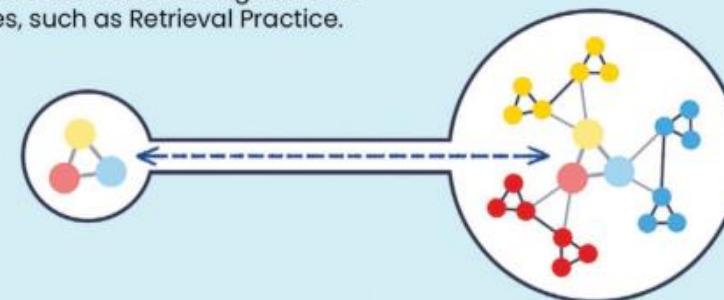
Long-term memory is very large

This means that we can remember things from years and years ago.



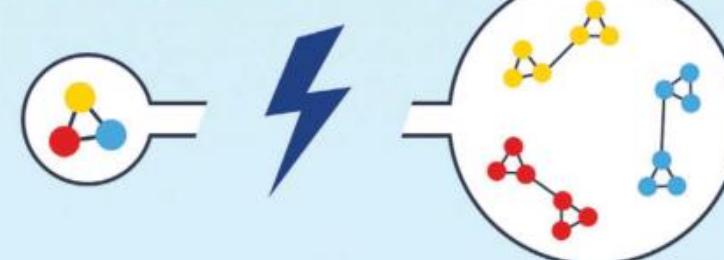
Transfer between working memory & long-term memory is key for learning

This can be facilitated through several strategies, such as Retrieval Practice.



Unfortunately, cognitive overload hinders this transfer

This overload can be reduced through mitigating the Redundancy, Split-Attention and Transient Information Effects.





Choke Points and Pitfalls in Learning

