

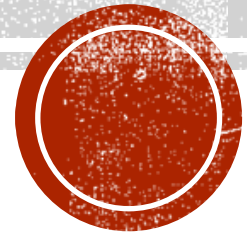
CLOUD COMPUTING

FALL 2021

MON/WED 6-7:15PM EST

Mohamed Farag

(dr.farag@pitt.edu)



WELCOME & LECTURE OUTLINE

- Why Cloud computing course?
- Instructors Bio
- Introductions
- Course Objectives
- Syllabus
- Course Grading Structure



THE MOST IN-DEMAND HARD SKILLS OF 2019

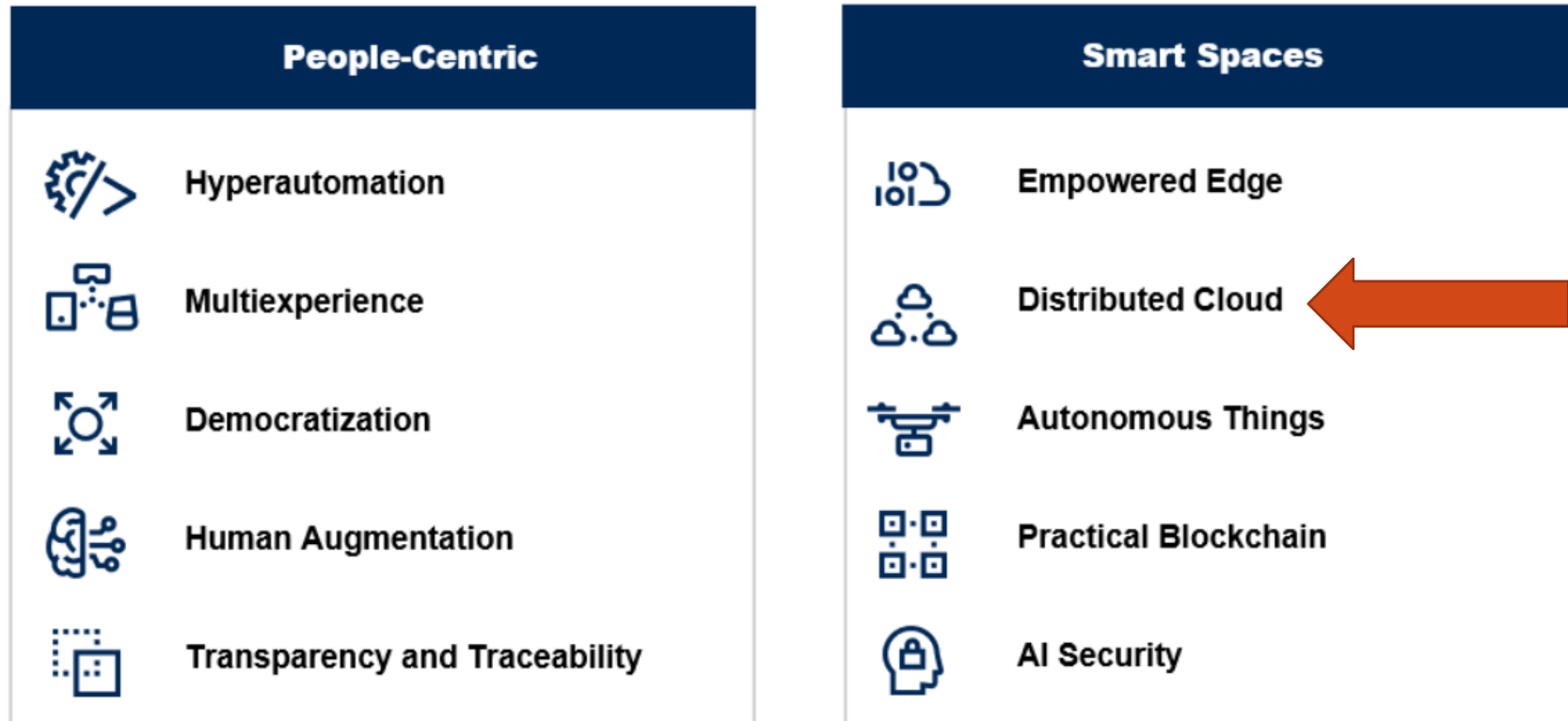
1. Cloud Computing
2. Artificial Intelligence
3. Analytical Reasoning
4. People Management
5. UX Design
6. Mobile Application Development
7. Video Production
8. Sales Leadership
9. Translation
10. Audio Production
11. Natural Language Processing
12. Scientific Computing
13. Game Development
14. Social Media Marketing
15. Animation
16. Business Analysis
17. Journalism
18. Digital Marketing
19. Industrial Design
20. Competitive Strategies
21. Customer Service Systems
22. Software Testing
23. Data Science
24. Computer Graphics
25. Corporate Communications

THE MOST IN-DEMAND HARD SKILLS OF 2021

1. Business Analysis
2. Analytical Reasoning
3. Affiliate Marketing
4. Sales
5. Cloud Computing



TOP STRATEGIC TECHNOLOGY TRENDS FOR 2020



Source: Gartner (October 2019)
ID: 432920



HARD SKILLS OFFERED IN THIS COURSE

- Cloud Vendors
 - Amazon Web Services
 - Google Cloud Platform
 - Microsoft Azure
- BigData Processing Platforms
 - Apache Hadoop
 - Apache Spark
- Deployment Scaling and Orchestration
 - Docker
 - Kubernetes
- Programming Languages:
 - Java
 - Python
 - Scala
- NoSQL Database
 - DynamoDB



CS/IT JOB MARKET

BIG DATA Consultants available: Hadoop Developers(75-80/hr),
Hadoop Administrator(75-85/hr),
Big Data Architect(85-95/hr),
SAP HANA(75-95/hr)

New Technologies: Mobile Apps Development: iPhone/Android, SDK, RESTful API,

Facebook Connect API,iOS(70/hr).

Ruby on Rails(75/hr), Drupal/Joomla(75/hr),

OBIEE(85/hr), Silverlight(70/hr),

Tableau Developers, Admins(70-85/hr), Pega Developer(75/hr)

Programming: J2EE, EJB(60/hr), .Net, VB.Net, C#, ASP.Net(60/hr),

C/C++(55/hr), Biztalk(65/hr), VB/ASP(55/hr), PowerBuilder(55/hr), VBA(50/hr)

Datawarehouse: Informatica(55/hr), Datastage(55/hr), SQL DTS(55/hr)

DB Admin: Oracle DBA(65/hr), DB2 DBA(65/hr), Sybase DBA(65/hr),

SQL DBA(65/hr), Moodle(75/hr)

O/S Admin: Unix / AIX/ NT/ WebSphere / Weblogic Administrator(65/hr)

Other: Quality Assurance Engineer(50/hr), Mainframe(55/hr),

Network Engineer(70/hr)



COURSE INSTRUCTORS

Mohamed Farag (he/him)

- Office hours: Tue/Thu 9-10am EST.
- Career Highlights:
 - Chief Executive Officer at Analytics 4 Everyone LLC.
 - AI/ML Advisor at CMU Tech and Entrepreneurship Group.
 - Lecturer at Carnegie Mellon University.
- Preferred form of address: Dr. Farag.



STUDENT INTRODUCTIONS

- Your name, nickname and pronouns.
- Previous cloud experience – if any-.
- Class expectations.
- Any expected challenges.



COURSE OBJECTIVE

- Understand the current cloud computing technology and critical technology trends that are enabling cloud computing, including
 - Cloud Computing architecture and the design of existing deployments, the services and the applications they offer



WHY DO WE CARE ABOUT CLOUD COMPUTING?

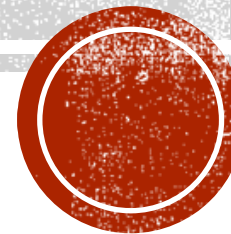


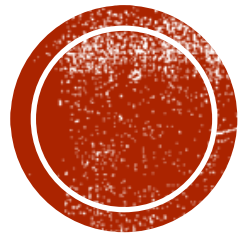
COURSE INFORMATION

- Course materials are posted on Canvas.
- Lectures are presented on TopHat.
- Final exam and quizzes are conducted on TopHat
- Mini career-coaching sessions are provided during the break.



COURSE SYLLABUS





Q&A

