# AWS re:Invent

NOV. 29 – DEC. 3, 2021 | LAS VEGAS, NV

ABW001

# Machine learning opportunities for underrepresented groups

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Amazon Web Services

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CEO & Founder
Girls in Tech

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# Agenda

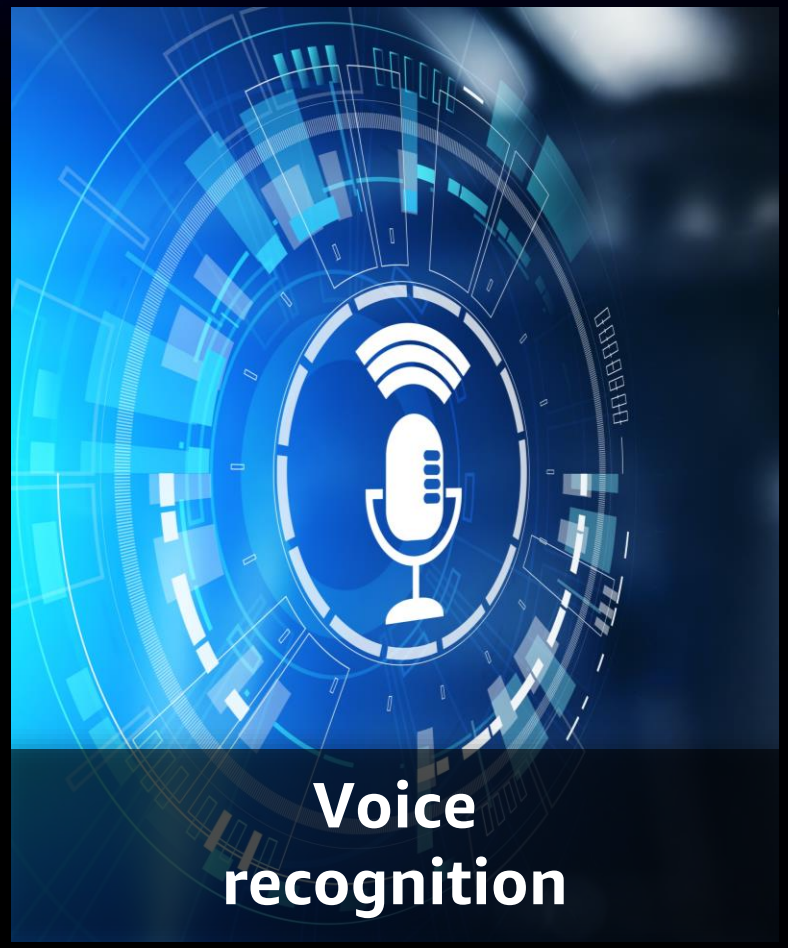
Why ID&E in ML matters

Enabling ML learners with AWS

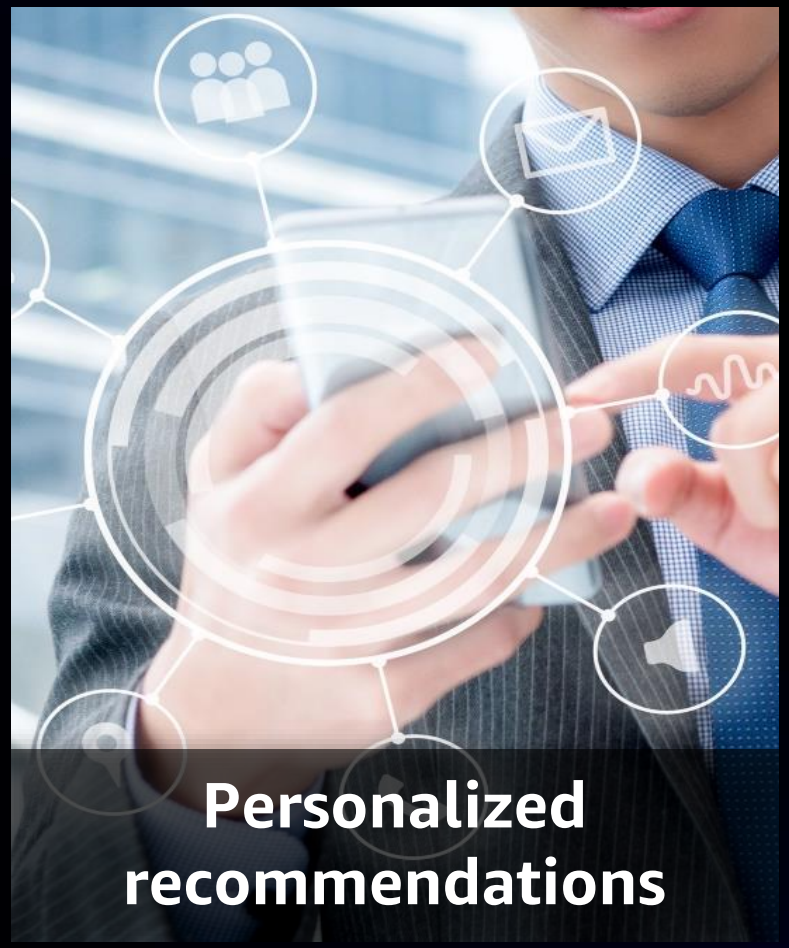
Customer story: Girls in Tech

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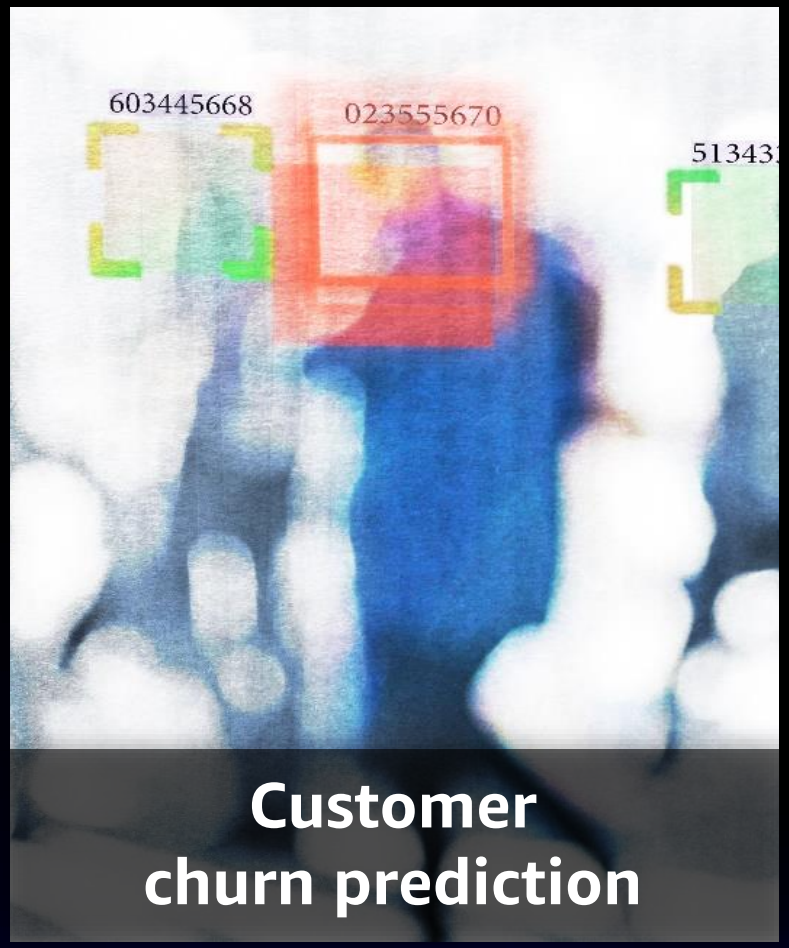
# ML all around us



Voice recognition



Personalized recommendations




Customer churn prediction

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# Why ID&E in ML matters

**97M**

New jobs in the machine learning sector by 2025

Source: World Economic Forum

**26%**

Of data and AI positions are held by women

Source: Deloitte AI Institute

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**“The best technologies, in their conception and execution, consider the most people, so inclusive design matters – which means inclusivity matters. And if machine learning is to match its world-changing potential, it requires diversity of brain power, cultural experience, and creative mindset.”**

Adriana Gascoigne

CEO & Founder of Girls in Tech

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# Enabling ML learners with AWS




aws re/start

MACHINE LEARNING UNIVERSITY

aws educate

aws training and certification




aws

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# Amazon future engineer

COMPUTER SCIENCE OPPORTUNITIES, FROM CHILDHOOD TO CAREER



## Explore

Students from underserved and underrepresented backgrounds explore the world of computer science and try out different careers. Through AFE programs, they use code to make music, program robots, and solve problems.



## Learn

Anyone can learn computer science. Teachers from underserved schools learn how to teach computer science through free curriculum and professional development provided by Amazon Future Engineer and curriculum partners.



## Build

Amazon Future Engineer students build a better future for themselves and their community, with the support of college funding, paid internships, and industry mentors.

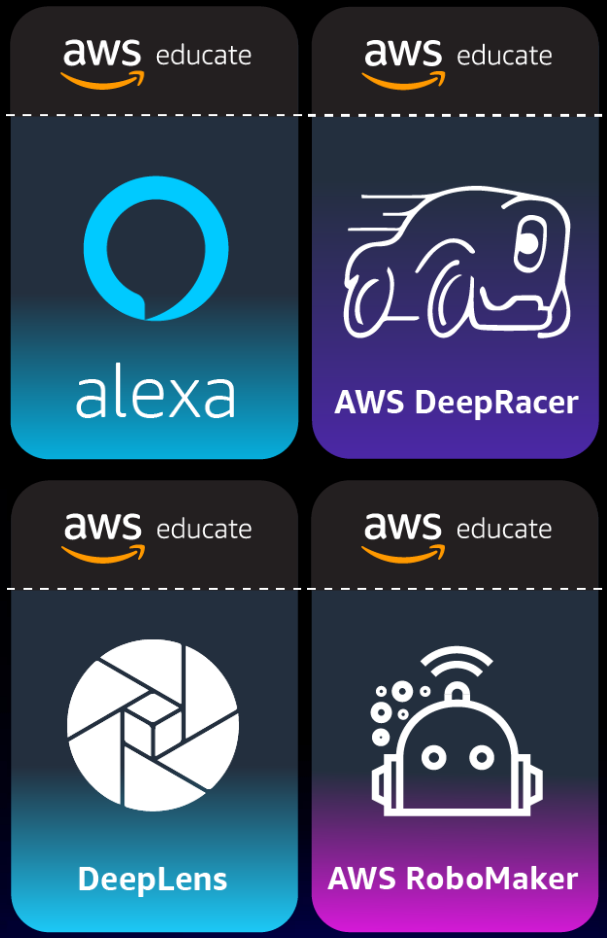
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# AWS Educate

GLOBAL INITIATIVE TO ACCELERATE CLOUD LEARNING AND PREPARE STUDENTS FOR THE CLOUD-ENABLED JOBS OF TOMORROW

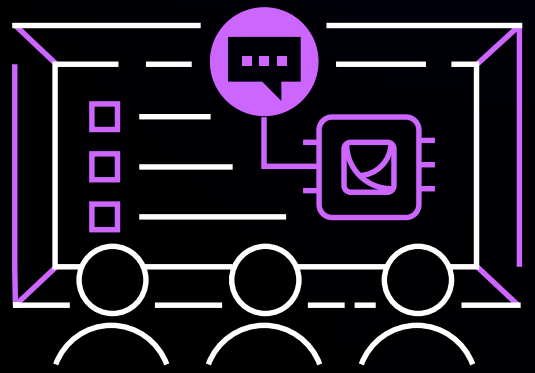
- **Self-paced**, online cloud career badges and pathways
- **Hands-on learning** using AWS promotional credits
- **AWS Educate job board** mapped to career pathways (post-secondary)
- **Training** and professional development
- **AWS Educate classrooms**




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# AWS re/Start

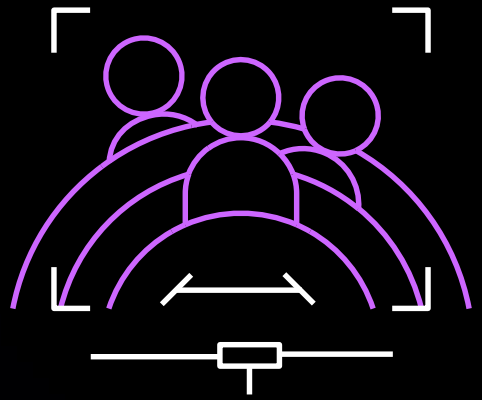
FULL-TIME SKILLS DEVELOPMENT PROGRAM THAT PREPARES INDIVIDUALS FOR ENTRY-LEVEL CLOUD POSITIONS



Trained in AWS Cloud fundamentals



Prepared to take the AWS Certified Cloud Practitioner exam



Ready to connect with employers

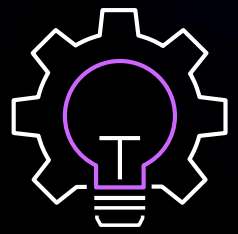
See more at https://aws.amazon.com/training/restart

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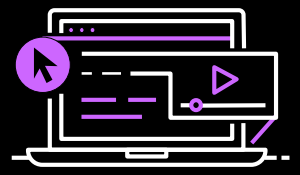
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# Machine learning with AWS training and certification

DEVELOP YOUR TEAM, INNOVATE IN THE CLOUD, AND TRANSFORM YOUR ORGANIZATION



Courses for your role, including developers, data scientists, data platform engineers, and business decision-makers



65+ free digital ML courses from AWS experts let you learn from real-world challenges tackled at Amazon



Build credibility and confidence with an AWS Certification

**AWS Certified Machine Learning—Specialty**

See more at https://aws.training/machinelearning

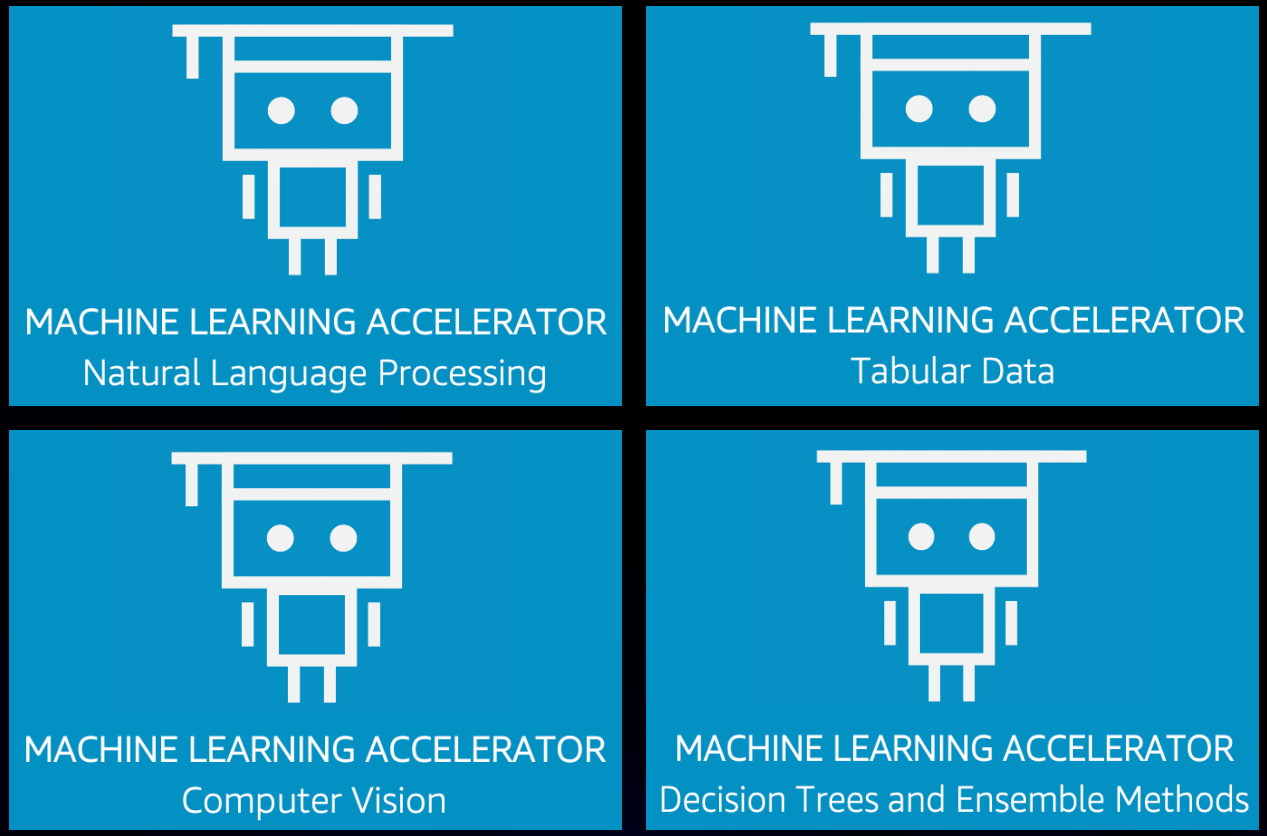
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# Machine Learning University

SELF-SERVICE MACHINE LEARNING TRAINING FROM AMAZON'S OWN SCIENTISTS

- Learn-at-your-own-pace MLU Accelerator learning series
- Advanced courses
- Videos available on YouTube
- Hands-on examples/notebooks (available on GitHub)




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# AWS DeepRacer

ENABLING DEVELOPERS TO GET HANDS-ON EXPERIENCE WITH MACHINE LEARNING



1/18th scale autonomous race car



Virtual simulator to train and evaluate

Global racing league

See more at https://aws.amazon.com/deepracer/

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# Customer story: Girls in Tech

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# Girls in Tech: Why?

**Founded in 2007 by Adriana Gascoigne, Girls in Tech is a nonprofit organization dedicated to eliminating the gender gap in tech**

**70K+**

Members in across 55 global chapters

**5K+**

Entrepreneurs funded, mentored, and supported through AMPLIFY, our startup pitch competitions

**75K+**

Participants in GIT-sponsored coding, design, and startup bootcamps

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# Girls in Tech: Who we are

# The challenge

**“If we don’t get women and people of colour at the table – real technologists doing the real work – we will bias systems… This is the time to get women and diverse voices in so that we build it properly.”**

Fei-Fei Li

Sequoia Professor of Computer Science at Stanford University

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# AWS Machine Learning Scholarship Program

## 425 scholarships, with a focus on women and underrepresented groups

UDACITY

### Become a Machine Learning Engineer



Learn what machine learning is and the steps involved in building and evaluating models. Gain in demand skills needed at businesses working to solve challenges with AI.



Learn the fundamentals of advanced machine learning areas such as computer vision, reinforcement learning, and generative AI. Get hands-on with machine learning using AWS AI Devices (i.e. AWS DeepLens, AWS DeepRacer, and AWS DeepComposer)



Learn how to prepare, build, train, and deploy high-quality machine learning (ML) models quickly with Amazon SageMaker.

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# Unlock new career potential

MENTORSHIP BY GIRLS IN TECH

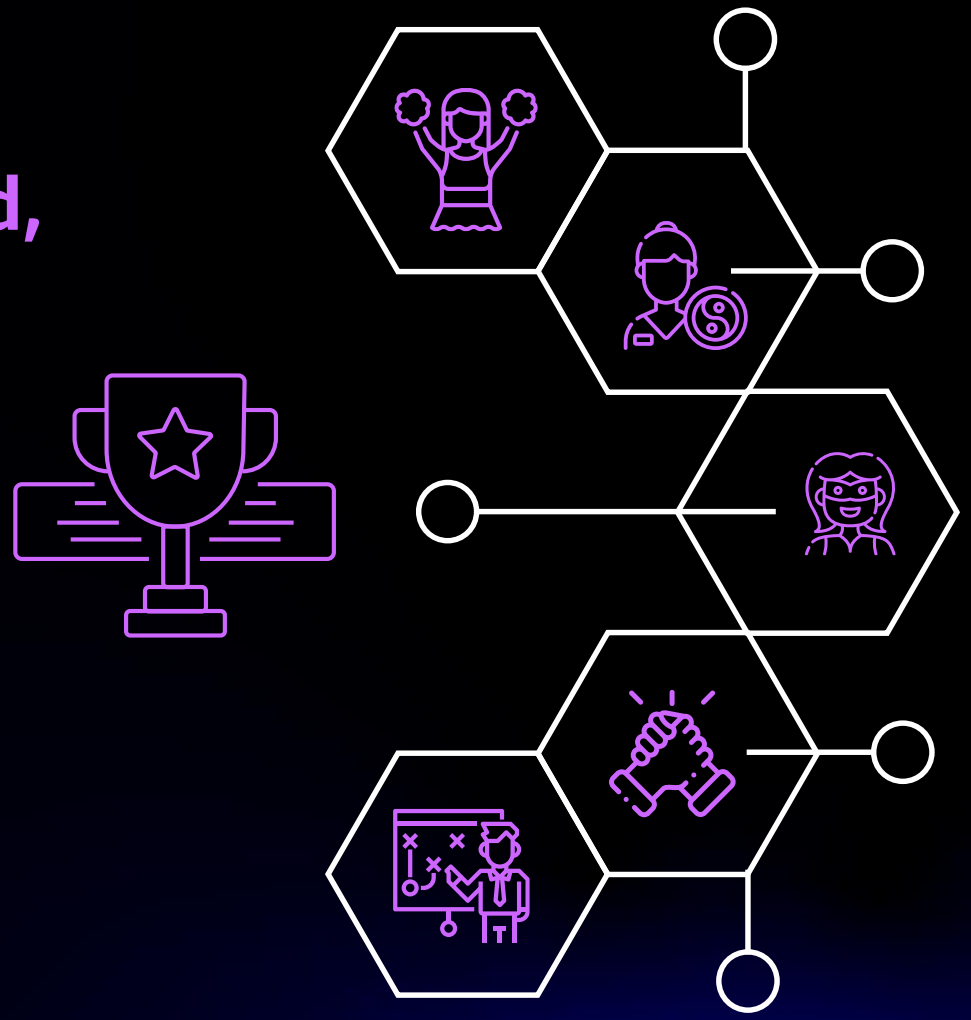
**A mentor is like a coach, therapist, friend, and cheerleader all rolled into one**

Hold yourself accountable

Inspire your growth

Gain encouragement

Personal soundboard



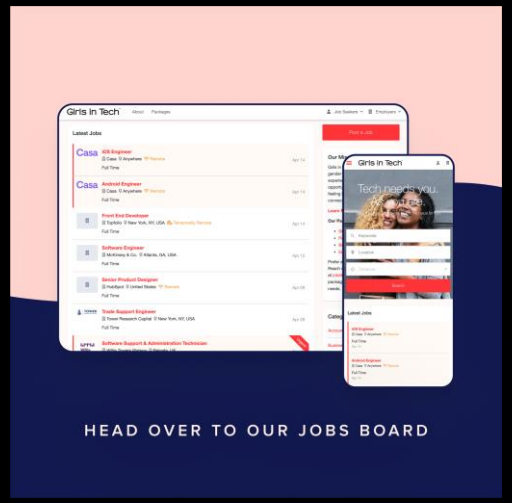
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# What's next













Jobs Board

AI/ML Mentorship

Global Classroom

Digital Career Fair

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# Take action

## Get inspired

Learn about the positive impact diverse and inclusive teams have on company success and get inspired to take action

## AWS ML/LearnML

Unlock your ML skills and career potential with deep dive coursework, hands-on tutorials, and more

## Girls in Tech

Discover inspiring programs and a diverse community designed to help you enter into and excel in tech

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# Thank you!

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