Harnessing Human Centric Al to Transform Business and Education

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February 15, 2024

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Intel Purpose

We create world-changing technology that improves the life of every person on the planet



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Bridging physical and digital worlds with Technology Superpowers

Ubiquitous





Cloud-to-Edge





Sensing

Semiconductors are the underlying technology empowering developers and powering our customers' innovations



Al is everywhere Al talent is not everywhere

Health Agriculture Energy Education Government Finance Achieve higher Maximize Transform Turn data yields & increase production the learning Enhance safety, into valuable Revolutionize efficiency and uptime experience research, and more intelligence patient outcomes Industrial Smart Home Telecom Transport Media Retail Contraction of the second Empower Create Transform **Enable homes** Drive network truly intelligent thrilling that see, hear, and operational Automated stores and Industry 4.0 and respond efficiency driving experiences inventory

Al is everywhere Al talent is not everywhere

Innovation requires that we open new opportunities for everyone to participate



Jobs for the Future

The AI-Ready Workforce

How Leaders and Workers Can Prepare for a Reshaped Future of Work

PRESENTED BY The Center for Artificial Intelligence & the Future of Work NOVEMBER 2023 https://www.jff.org/the-ai-ready-workforce-report-findsmost-jobs-will-be-transformed-not-displaced-by-ai/

Human-centric focus is essential

 Universal AI Literacy: offer foundational awareness-building and training in core AI tools, and skills, including benefits and pitfalls, for every learner and worker.

✓ Worker Voice and Engagement:

encourage worker experimentation with AI technology to uncover innovative use cases

Key findings:

- Al is more likely to <u>reshape not replace jobs</u>
- Every occupation will benefit by focusing human skills that can be elevated with AI

AI-Ready Workforce Blueprint Jobs for the Future PREPARING ECOSYSTEMS **The AI-Ready** Workforce Ores Norkforce P How Leaders and Workers Can Prepare for a Reshaped Future of Work Data & Evaluation ng Sti PREPARING HUMANS Education-to-Careet https://www.jff.org/the-ai-ready-workforce-report-finds-PRESENTED BY Public 8 Pilate ce & the Future of World most-jobs-will-be-transformed-not-displaced-by-ai logy Infrastructure

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The Pathway to Innovation

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Al is everywhere, Al talent & opportunities are not



Workforce Preparation : New Paradigms

Learnability is the key passport for future





Learning and Work will remain an integrated social experience

Digital Readiness

Digital Readiness encompasses the skills, trust, and ability of people to use technologies responsibly and effectively for broader socio-economic benefits.

Digital Skills

- Gain an understanding of emerging tech
- Acquire technical and social capabilities of emerging tech

Build deep confidence in emerging tech:

Trust

- Ethics & Responsibility
- Privacy & Control
- Security & Reliability
- Transparency & Accessibility

- Responsible Use
 - Understand potential & limitations, build impactful use-cases and solutions
 - Integrate emerging tech for better productivity and efficiency

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Expanding Digital Readiness is at the core to Intel's corporate purpose

Intel[®] Digital Readiness Program – Public-Private Ecosystem Portfolio

Current Programs	Al for Citizens	Al for Youth	Al for Future Workforce	Al for Current Workforce	Digital Readiness for Leaders	Al Global Impact Festival
Government Goals	Engagement	Education	Employability	Employment/ Entrepreneurship	Economic Growth	Democratization of Al
Audience Needs	Public Awareness	High School Skilling	Vocational Skilling	On Job Upskilling / Reskilling	Leaders Tech Readiness	Impact Celebration



Re	sults to date	<u>2030 Goal</u>
Countries	27	30
nstitutions	21,000	30,000
People trained	6,000,000	30,000,000

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Current Programs	Al for Citizens	Al for Youth	Al for Future Workforce	Al for Current Workforce	Digital Readiness for Leaders	Al Global Impact Festival
Government Goals			Employability			
Audience Needs			Vocational Skilling			



Blue Ash College Central Ohio Technical College Columbus State Community College Eastern Gateway Community College Rhodes State College Southern State Community College Stark State College

Intel[®] Digital Readiness Program Design





Employability Skills Gained – Al for Future Workforce



Current List of Pre-packaged Courses

Each Course is 16 weeks, 64 hrs in total – 64hr x 6 courses = 384hr

AI for Computer Vision Intro to Al Intro to ML Basic concepts and applications of artificial intelligence (AI) Basic techniques to process images using Introduction to Machine Learning concepts Introduction to AI project cycle Introduction to Python applications **OpenCV and Python libraries** Focus on issues surrounding AI Data Acquisition and Data Modelling Apply AI in CV for common tasks like Image • Ethics, Bias, Culture, Regulations, and Supervised and Unsupervised learning **Classification and Object Detection Professional Expectations Data-Centric AI: Applied Mathematics for AI** Natural Language Processing Data-first approach to Al Focus on the data aspect of AI • Basic concepts for the role of Mathematics in AI Fundamental concepts in NLP and text processing · Learning how to work with data (statistical, Application of Statistics, Linear Algebra,

- Creating a Language Recognition application
- Generative AI

Probability • Application of topics with reference to their role in the AI Project Cycle.

- text, and visual)
- Continuous improvements to datasets improve AI solutions
- Integrate and manage data pipelines with **MLOps**

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Workforce Readiness Outcomes

Fostering responsible & diverse AI talent for the world



Denzel Wilson, Houston Community College

- Conducted groundbreaking research on Industrial Safety Through Computer Vision, earning US country winner recognition in the 2022 Intel[®] AI Global Impact Festival
- Honored as a NASA L-Space MCA Scholar and an undergraduate research assistant at Rice University
- Now continuing his quest for knowledge by **pursuing a Bachelor of Science degree** at the University of Houston, with his sights set on a promising future in AI and automation and working with SEED AI

Olivia Thorburn, Chandler Gilbert Community College

- Postponed Veterinary school and enrolled in Intel AI course at CGCC, loved AI so transitioned from animal care to AI and Machine Learning.
- Landed a position on Apple's Al and Machine learning team in January 2023



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Enabling New Teaching and Learning Experiences

Educators and Administrators

Teaching assistant

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- Curriculum design
- Administrative task automation
- Resource planning

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Students

- Personalized learning
- Tutoring
- Assistance for students with special needs
- Innovation labs

Keeping it Safe and Responsible

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London 24-26 January 2024



Sal Khan, CEO, Khan Academy



Enabling the Power of Al in Ohio Schools



Jason Feig Director of Partnerships, Primary and Secondary Education, for Khan Academy

Success Factors

Commitment + Collaboration + Community

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Al curriculum/ program is part of a future growth/plan Cross-discipline and entrepreneurial mindset Innovation Adoption Champion

Integrating curriculum to fit learning models Mobilize industry & community partners

