



The International
Society of
**Service
Innovation**
Professionals



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Credentialing Innovations: Encouraging Industry-Academia Collaborations

Participants will learn about state-of-the-art alternative credentialing for skills to jobs. ISSIP-NSF event sponsors are keen to understand advances, obstacles, as well as Research funding opportunities to deepen knowledge and accelerate progress.

Wednesday December 15, 2021 12noon-3pm ET/9am-12noon PT

[Summary Event Webpage Here](#) links to prep materials and will link to recording

ISSIP-NSF Workshop Series on An Industry Perspective on STEM Education for the Future

*Providing service opportunities
and innovation recognition for
professionals and students
who grow and share their knowledge
in an inter-connected world.*

<https://www.issip.org>



Innovations in Credentialing & Industry-Academia Collaborations

Workshop 4 in the ISSIP/NSF Series on Future of
Work, Learning, and STEM Skills

Dec 15, 2021

Thank You!

Lead Sponsor



Others



Project Team

Yassi Moghaddam, ISSIP (PI)
Dr. Haluk Demirkan, University of Washington (Co-PI)
Dr. Lou Freund, San Jose State University (Co-PI)
Dr. Martha Russell, Stanford
Dr. Jo Yuen, ISSIP

Thank you, other Programming Committee Members & Workshop Chairs!

Ralph Badinelli, Professor, Virginia Tech, ISSIP BOD Member
Terri Griffith, Chair in Innovation and Entrepreneurship Beedie School of Business, Simon Fraser University;
ISSIP President-Elect
Utpal Mangla, VP, IBM; ISSIP Strategy Council Chair
Ammar Rayes, Distinguished Engineer, Cisco; ISSIP BOD Member
Gonzalo Salgueiro, Distinguished Engineer, Cisco; ISSIP BOD Member
Jim Spohrer, ISSIP Co-Founder & BOD Member
Ulf Vinneras, Head of Service Product Management, Aruba (HPE); ISSIP President
Heather Yurko, VP, Mastercard; ISSIP Past President, Strategy Council Member

And thank you, Distinguished Speakers!

About ISSIP

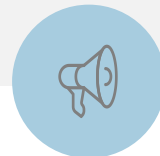
ISSIP Platform connects Academia and Industry

- Events and forums for academia and industry representatives to collaborate
- Publications



Thought Leadership in Service Innovation

- Define Service Innovation as an academic discipline
- Provide professional association awards, recognition, badges for service innovation



Influence policy for Work and Education

- Work with the NSF and the EU in the area of future education
- Upskilling and Growth Mindset



9:00 PT ISSIP Welcome – VP and Exec Director

5 Minute Opening Statements

With 1-2 minute transition between speakers

From top-left to bottom-right:

9:04 Jim Spohrer (ISSIP, Moderator)

9:06 Peter Janzow (Credly)

9:13 Sean Gallagher (Northeastern)

9:20 David Leaser (IBM)

9:27 Sudarshan Krishnamurthi (Microsoft)

9:34 Steve Wright (ICT and Digital Media, CCC)

9:41 Nathan Sowatskey (Cisco)

9:48 Yassi Moghaddam (ISSIP)

10:05-10:55 First round of Q&A/Discussion

11:05-11:55 Second round of Q&A/Discussion

11:55-12noon Closing Remarks and Thanks to All



Peter Janzow (Credly)

- Janzow (2018) [Unlock Career Potential With Digital Credentials](#)
- Credly is [growing fast!](#)
- “It’s up to each of us to proactively plan and manage our career paths. Deciding to pursue a professional training certification is a great step in the right direction toward preparing yourself for a career in a field many organizations are increasingly relying on to upskill their workforce. To boost the impact of earning a specialized credential, many professional associations and organizations now issue a verifiable digital credential...”

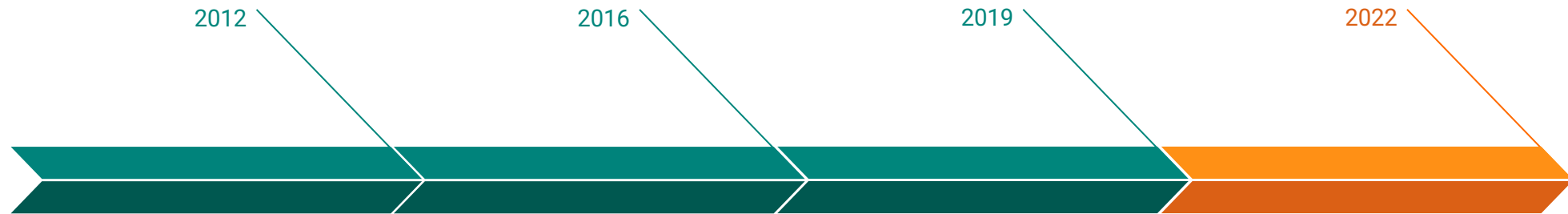


Q1: Quantitative value of digital credentials? How to know which to get to aim at best paying jobs?

Q2: Best strategies for using digital credentials by job seekers?

Building a Verified Talent Network

The Credly Story of Data-Driven Human Capital Decision-making



Inspire

Open standard for structured and verified skills

Evangelizing a vision for “resume-worthy” achievements

Build

Helping organizations build the business case for recognition & credentialing

Connecting credentialing data to business drivers: Attract, Engage and Retain Talent

Establishing early examples and best practices

Scale

Growing the network across industries and professions

Building density of credentials for jobs in key verticals: tech, finance, health care, skilled trades, soft skills

Tipping point: Tens of Millions of credentials and earners

Connect

What can you do with verified skill credentials?

Connecting employers, certification and training groups, universities, & jobs

Unlocking opportunity at scale for individuals

Driving skill-based talent management

Life Cycle of Digital Credentials



Create



Issue



Promote



Analyze



Benefit

Respected Credentials for the Most In-Demand Skills

The world's most recognized brands recognize their people with Credly digital credentials



Associations



Businesses



Training & Education

Verified Skills in Human Capital Management

through digital credentials

Which workers have what verified skills and credentials?

How can we source talent and accelerate hiring for projects and teams based on skills

What skills do we have and which do we need for our future workforce?

How can we drive learning and career development throughout our extended workforce?

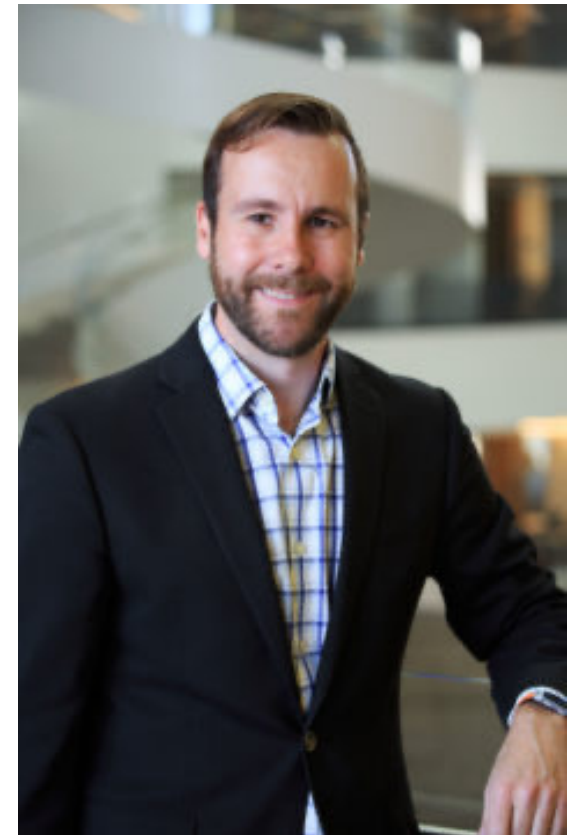
Can we advance a diverse, more equitable talent agenda based on skill and merit?

How will we ensure compliance with credentials required to do business

Skill-based talent management has become a business imperative for leading companies

Sean Gallagher (Northeastern)

- [Dr. Sean Gallagher](#) is founder and Executive Director of Northeastern University's Center for the Future of Higher Education and Talent Strategy, and Executive Professor of Educational Policy.
- Gallagher (2016) [The Future of University Credentials: New Developments at the Intersection of Higher Education and Hiring.](#)
- Online talk/recording on [credentialing innovation](#) and pace of change of skills needs in industry.



Q1: Do you see a maturity curve that employers follow when it comes to digital micro-credentials?

Q2: Best strategies for using digital credentials by job seekers? Employers?

Research-Based Perspectives on Credentialing Trends



Credentialing Trends Based on Recent Research



Still limited data on market demand and outcomes: important area of ongoing study



Surging consumer interest: short-term credentials as top working adult learner preference; significant growth in badge issuance, certificate enrollment, etc.



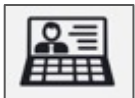
Greater employer acceptance of online learning/credentials, accelerated by pandemic



Employers and industry groups as credential issuers: >70% growth in 2020



Corporate L&D shifting toward J.I.T. “microlearning,” microcredentialing, and curated digital course/content libraries



Steady adoption of HR tech – and growing use of skills-based hiring, talent analytics



Employer awareness and experience with digital credentials growing steadily – but still more guidance needed for employers, colleges, consumers

- Cultural change in addition to crucial infrastructure development

David Leaser (IBM)

- David's [Slides](#).
- David's suggested prep materials:
 - [Importance of Incremental Credentialing](#)
 - [Will Microcredentials be the Rx Needed to Fix Our Ailing Degree Systems?](#)
 - [Future-Proofing the Credentialing Ecosystem: Bringing Microcredentials Into the Fold](#)
 - [How IBM used badges to connect on-the-job learning to academic credit](#)



David Leaser (IBM)

- David's Blog on [Training and Skills](#).
- Leaser (2020) "[IBM Awards Its Three Millionth Digital Badge](#)."
- **"Higher ed and industry can now speak the same language:** A digital badge can provide all of the information a college or university needs to make a decision on how much value to assign to the activity. The digital badge serves as a proxy transcript for the activity."



Q1: Quantitative value of digital credentials? How to know which to get to aim at best paying jobs?

Q2: Best strategies for using digital credentials by job seekers?

The power of incremental digital credentials

DAVID LEASER | FOUNDER OF THE IBM DIGITAL BADGE PROGRAM

@david_leaser

Pace of change is accelerating beyond our wildest imagination

50% of the labor force's current work activities are technically automatable by adapting existing technologies ([McKinsey](#))

40% of U.S. jobs are in occupations likely to shrink or be cut by 2030 ([McKinsey](#))

85 million jobs globally may be displaced by a shift in the division of labor between human beings and machines* ([World Economic Forum](#))

*And 97 million new roles more adapted to this new division of humans and machines are expected to emerge.

Will it take four years to prepare for the jobs of the future?

At IBM, 50% of jobs no longer require a college degree ([Gallup](#))

60% of Americans prefer short-term training to degree programs ([Strada Education Network](#))

36 million Americans hold some postsecondary education, but no completion, and they are no longer enrolled. This group is also known as the *Some College, No Degree* population ([NCS Research](#))

Credential As You Go: The rise of incremental credentialing

Shouldn't we issue credentials
along the way?

Professional Certificate in Full Stack
Cloud Developer

MicroBachelors program

Badges in schools when ready, not after
four years

Eight benefits of incremental credentials



**Accelerate entry
into a career**



**Match the demand
for talent**



**Signal discreet skills aligned
to job needs**



Improve inclusivity



**Align with the way people
Actually Learn—non-linear**



**Fill gaps and Save time
and limited resources**



**Create progression,
motivation and engagement**



**Save the college system,
not the diploma**

Sudarshan Krishnamurthi (Microsoft)

- [Sudarshan](#) is a product management leader for Microsoft certifications. Sudarshan is passionate about new ways of skilling and helping deliver awesome learner experiences.
- Ung (2021) [What goes into creating Microsoft certifications?](#)
- [Ask the Experts](#) Video



Q1: Quantitative value of digital credentials? How to know which to get to aim at best paying jobs?

Q2: Best strategies for using digital credentials by job seekers?



- Credentials need to help learners on a path towards employability or better productivity at their jobs.
- Credentials demonstrate doing skills more than knowing skills.
- Delightful experience/ Anxiety-free process to earn credentials.
- Credentials are transferable - Get credit for skills already demonstrated.
- Stackable – build on top of each other.
- Verifiable by employers, customers, partners.
- Shareable on LinkedIn and other social sites.

Steve Wright (ICT and Digital Media, CCC)

- [Stephen Wright](#) | Director of Information Communications Technologies and Digital Media Sector, Doing What Matters for Jobs & the Economy, Economic & Workforce Development, California Community Colleges System
- Wright (2016) [Digital Badges and the Career Pathway: Assessing the Obstacles](#) "The badges we're looking at now focus on third-party certifications for which there's already a demand."



Q1: Do you see a maturity curve that employers follow when it comes to digital micro-credentials?

Q2: Best strategies for using digital credentials by job seekers? Employers?



CCC Realities : Career Technical Education:

- **Students with a wide variety of needs.**
 - Entry level
 - Career Transformers
 - Up-skillers
- **Decentralized curriculum development**
- **Regional governance and economic response**
- **Student completion / retention challenge**



BBQ Question



Are there courses I could take that would really help me get a job to start a career ? ...in six months?

extended family member



Business Information Worker A Branded Pathway

>> Expanded Pathway Now Includes Advanced Stages

CALIFORNIA COMMUNITY COLLEGES

Business Information Worker

PATHWAY TO SUCCESS



STAGE ONE

- Keyboarding
- Microsoft Windows
- Microsoft Word
- Microsoft Excel
- Microsoft Outlook
- Information Systems
- Business Communications
- Human Relations/Customer Service



STAGE TWO

- Microsoft PowerPoint
- Microsoft Excel, Intermediate
- Microsoft Access or
- Introduction to SharePoint
- Quickbooks
- Electronic Records Management
- Customer Relationship Management



SPECIALIST

- Presentation/Marketing
- Communication Support
- Project Management Concepts
- Salesforce Certification Prep



Get Industry Recognized Certifications/ Digital Badges for LinkedIn Profile

	Course Name or Topic	Certifications
BIW I	Keyboarding	
	Microsoft Windows	
	Microsoft Word	MOS Word
	Microsoft Excel	MOS Excel
	Microsoft Outlook	MOS Outlook
	Information Systems	
	Business Communications	
	Human Relations/Customer Service	
BIW II	Microsoft PowerPoint	MOS PowerPoint
	Microsoft Excel, Intermediate	
	Microsoft Access or Intro to SharePoint	MOS Access
	QuickBooks	QuickBooks Certified User
	Electronic Records Management	
	Customer Relationship Management	
BIW Specialist	Presentation/Marketing Communication Support	
	Project Management Concepts	CompTIA Project+ Salesforce Certified Administrator
	Salesforce Certification Prep	

Business Information Worker I



Business Information Worker II



Business Information Specialist





Manpower Support

Get Hired

*“Employers can confidently look at the **California Community College’s Business Information Worker Work Readiness Certificate/Pathway** as a tool to identify qualified potential job candidates. This program provides the “hiring for attitude and training for skills” foundations for entry-level jobs.”*

~ Phil Blair



Executive Officer –
Manpower San Diego
Author of “Job Won” (job-won.com)



Relevant IT Training Benchmarks

Consolidated from numerous one on one interviews with industry experts

- High School w/ Certification
 - CyberPatriot and A+ Certification
- ‘Recognized’ CCC credential
- **Specified 3rd Party Certifications**
- Relatively Low demand for AA/AS
- **Bachelors Degree**
- **Ten years experience**
- **Up-Skilling as incumbent**

Lesson: Get in the field, get started, continue to train



Response : ITTP

IT Technician Pathway



- ▶ Start Your IT Career in Less Than a Year
- ▶ Build an IT Future While You Work
- ▶ Train for Recognized Industry Certifications



IT TECHNICIAN PATHWAY – CYBERSECURITY SPECIALIST

	COURSE	CERTIFICATION	JOB	
PHASE 1	<ul style="list-style-type: none"> • Introduction to Retail or Business Fundamentals • Customer Service/Human Relations • Business Communications • Microsoft Office Essentials • Information & Communications Technology Essentials • Business Information Systems/Computer Information Systems 	▶ A+	Computer Retail Sales and Support	
	PHASE 2	<ul style="list-style-type: none"> • Computer Network Fundamentals • Systems and Network Administration (Network Operating Systems) • Installing, Configuring, and Administering a Microsoft OS • Introduction to Information Security Systems 	▶ Network+ ▶ MCSA Server 2016 ▶ MCTS: Win 10 ▶ Security+	Help Desk/User Support
	PHASE 3	<ul style="list-style-type: none"> • Routing & Switching Essentials • Installing, Configuring, and Administering Linux Operating System • Introduction to Scripting (Python/PowerShell) 	▶ Cisco CCENT ▶ Linux+	IT Technician
PHASE 4: SPECIALIZATION	CYBERSECURITY SPECIALIST			
	<ul style="list-style-type: none"> • Principles of Cybersecurity Analysis 	▶ CSA+	Computer Security Analyst	
	<ul style="list-style-type: none"> • Introduction to Computer Forensics Investigations 	▶ IACIS CFCE	Computer Forensic Investigator	
	<ul style="list-style-type: none"> • Introduction to Cybersecurity: Ethical Hacking 	▶ EC Council CEH	Penetration Tester	
	<ul style="list-style-type: none"> • Implementing Cisco Network Security 	▶ CCNA Security	Network Security Specialist	
	<ul style="list-style-type: none"> • Certified Information Systems Security Professional 	▶ CISSP	Cybersecurity Consultant	

DIGITAL BADGES LEAD TO JOBS

The Business Information Worker and IT Technician-Cybersecurity Pathways lead to more than 25 of the most in-demand digital badges in business and IT.

FIND YOUR PATHWAY AT THE CALIFORNIA COMMUNITY COLLEGES

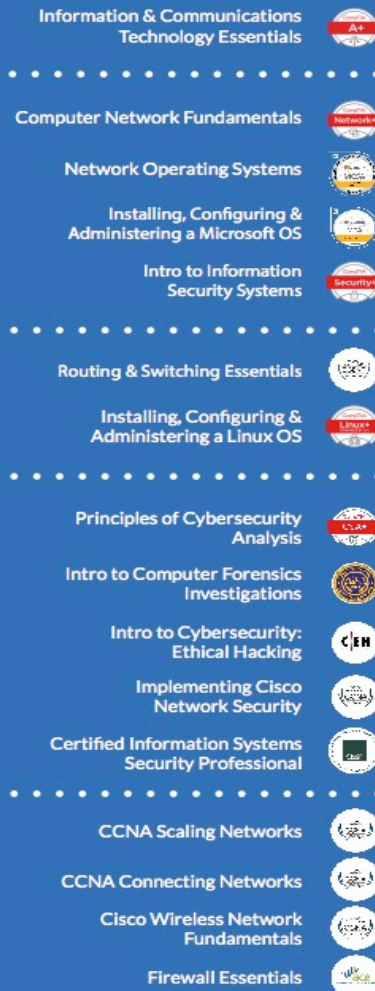
The new reality

- Earn an industry recognized certification
- Claim Badges and put on Linked In Profile
- Be Found – by recruiters

BUSINESS INFORMATION WORKER



IT TECHNICIAN-CYBERSECURITY



FOR MORE INFORMATION VISIT

ict-dm.net/pathways/digital-badges



The Information Communications
Technologies & Digital Media
Sector Navigation Team
CALIFORNIA COMMUNITY COLLEGES

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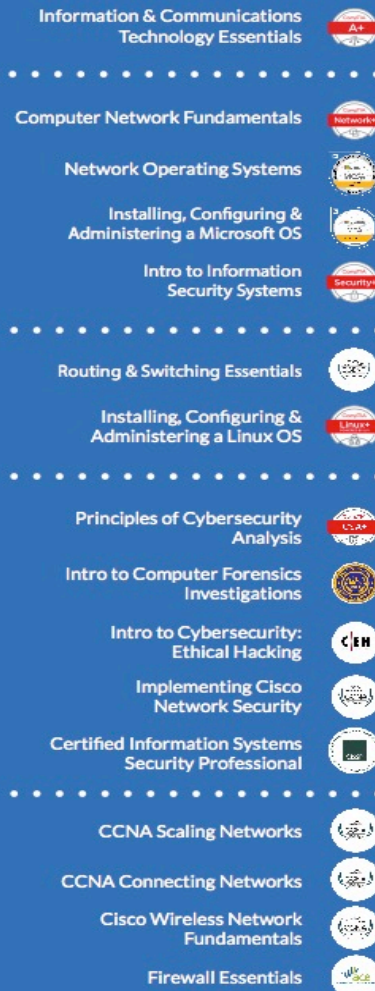
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BUSINESS INFORMATION WORKER



IT TECHNICIAN-CYBERSECURITY



FOR MORE INFORMATION VISIT

ict-dm.net/pathways/digital-badges



The Information Communications
Technologies & Digital Media
Sector Navigation Team
CALIFORNIA COMMUNITY COLLEGES

Nathan Sowatskey (Cisco)

- Nathan is a lifelong-learner who uses micro-credentialing to chart a career as a technology leader.
- Sowatskey (2021) [Cisco Cloud Experience White Paper: Continuity, Resiliency, and the Future of Work.](#)



Q1: What advise do you have for other lifelong learners, based on your experiences?

Q2: Best strategies for using digital credentials by job seekers?



Credentialing & Industry- Academia Collaborations

ISSIP-NSF Workshop Series on An Industry Perspective on STEM Education for
the Future

Nathan Sowatskey

Principal Engineer, Customer Experience (CX) office of the CTO

December 15, 2021

A Lifetime of Credentials

- BSc. (hons) Computer Science, University College London, 1987-91
- Postgraduate Certificate, Computing, The Open University, UK, 2005-08
- Postgraduate Diploma, Networks and Distributed Systems, Open University, 2005-08
- MSc. Networks and Distributed Systems, The Open University, 2005-10
- Practical Machine Learning, Regression Models, Reproducible Research, Statistical Inference, Exploratory Data Analysis, Getting and Cleaning Data, R Programming, The Data Scientist's Toolbox, Coursera/John Hopkins University, 2016
- Google Cloud Platform Big Data and Machine Learning Fundamentals, Coursera, 2017
- Developing Data Products, Coursera, 2017
- Machine Learning with Python, Big Data University, 2017
- The Basics of Hyperledger Fabric, Udemy, 2018
- MSc. Artificial Intelligence and Deep Learning, Universidad de Alcalá, Spain, 2018-19
- Introduction to Deep Learning, AWS, 2020
- Data Science @Cisco Black Belt, 2020
- AWS Certified Cloud Practitioner, 2021

Questions and Observations

- Is there a useful ontology that could be derived from my (not untypical?) learning journey?
- Academic exams bring intellectual rigor and internalization
- Practical courses (Coursera, Udemy, ...) matter for hands on experience
- Industry qualifications (Cisco, AWS, ...) tick CV search boxes
- There is no end to the learning journey, just as there is no pause in the changing technology landscape



Yassi Moghaddam (ISSIP)

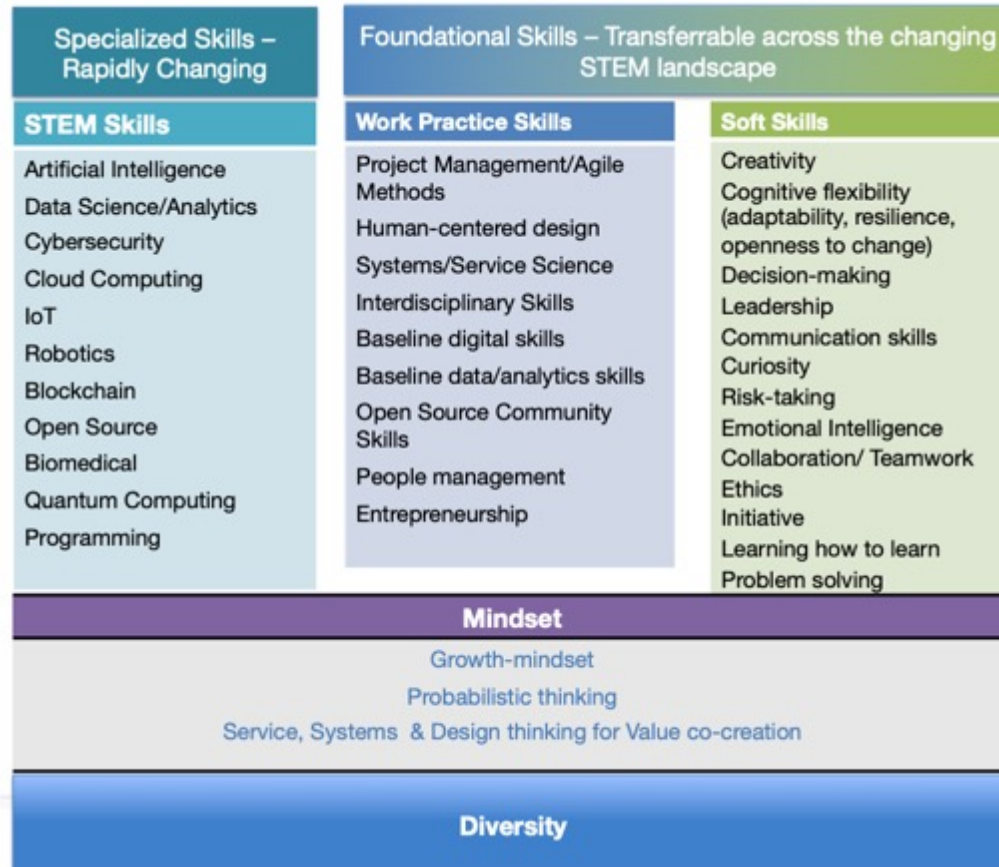
- Yassi is a lifelong learner, and executive director of the non-profit professional association ISSIP.org, which has recently started offering badges to community members, who exemplify knowledge sharing eminence and T-shaped skills, with problem-solving depth and communications breadth. She is also co-PI on the NSF workshop award exploring future of skills alignment between industry and academia.
- Moghaddam, Kwan, Freund, Russell (2021) [A Proposed Roadmap to Close the Gap Between Undergraduate Education and STEM Employment Across Industry Sectors](#)
- Moghaddam, Demirkan, Spohrer (2018) [T-Shaped Professionals: Adaptive Innovators](#)



Q1: What advise do you have for other lifelong learners, based on your experiences?

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An Industry Perspective On Skills Requirements For The Future (ISSIP NSF-sponsored work since 2019):



An evolving proposed roadmap to enable stakeholders align credentialing goals to increase the capacity of T-shape innovators

Source: Moghaddam, Kwan, Freund, Russell, A Proposed Roadmap to Close the Gap Between Undergraduate Education and STEM Employment Across Industry Sectors, Springer, 2021

Key Takeaways



STEM job opportunities will continue to grow increasing demand for high-skilled workers with specialized and foundational skills.



Specialized skills are constantly changing as technologies continue to advance.



Micro-learning can better facilitate rapid learning and upskilling for specialized skills.



Industry leaders encourage educators to strengthen 4-year STEM degree programs to provide the broad Foundational Skills and mindsets that transfer across jobs and prepare the learner for micro-learning throughout a lifetime.

ISSIP, early in the process of recognizing members through digital badging program



Excellence & Distinction in Service Innovation



Knowledge Sharing

Jim Spohrer (ISSIP, Moderator)

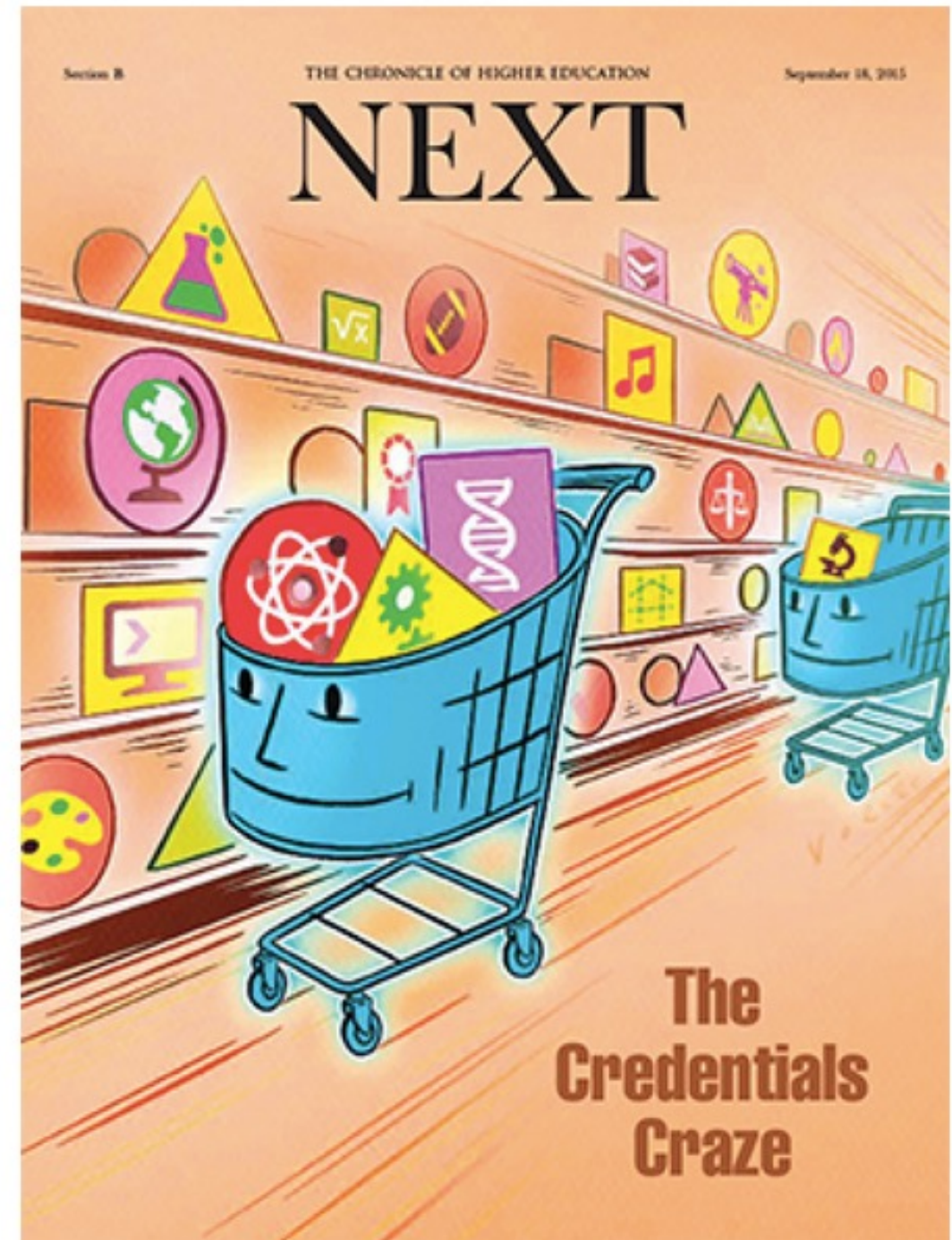
- On behalf of ISSIP, thanks to all our panelists and participants



Additional Readings and Perspectives

In The News

- The Chronicle of Higher Education
<https://www.chronicle.com/package/next-the-credentials-craze/>



Also In The News

- Notable results from those surveyed include:
- 73% of employers are using talent analytics in some way to improve hiring
- 69% of employers support industry-led competency frameworks
- 87% of HR leaders report having heard of digital badges, with almost half (48%) noting they have encountered badges in screening candidates or hired a badge holder
- 34% of HR leaders indicated their organization uses hiring strategies with a lens on competencies over college degrees
- 42% of respondents say their organization is exploring and considering skills and competency-based hiring approaches

The screenshot shows a news article on the CISION PRWeb website. The page has a dark header with navigation links: HOME, NEWS CENTER (highlighted), and BLOG. Below the header is a secondary navigation bar with categories: FRONT PAGE, ARTS, BUSINESS, EDUCATION, ENVIRONMENT, GOVERNMENT, INDUSTRY, LIFESTYLE, and SP. The date 'Tuesday, December 14, 2021' is displayed, along with RSS and Email Newsletters icons. The main headline is 'Research Shows Growing Employer Support for Competency Frameworks, Talent Analytics, and Skills-Based Hiring'. A sub-headline reads: 'A new report sponsored by the 1EdTech Foundation and IMS Global Learning Consortium as part of the Wellspring Initiative presents data on employers' readiness to use standards-based digital skills frameworks and credentials for talent management'. The byline is 'LAKE MARY, FLA. (PRWEB) DECEMBER 14, 2021'. The main text states: 'IMS Global Learning Consortium, the leading non-profit edtech innovation collaboration, and its affiliate charitable organization, the 1EdTech Foundation, announced today the availability of a new research report that benchmarks and guides future strategies for adopting digital credentials and competency frameworks in corporate hiring and talent development practices. This data is critical in today's job market, where employers struggle to find high-quality candidates.' A quote on the right side of the article reads: 'Wellspring facilitates collaboration among organizations to develop a more effective education-to-employment-to-lifelong learning ecosystem.' The bottom of the article text reads: 'The study, led by Northeastern University's Center for the Future of Higher Education and Talent Strategy, synthesizes data from 750 talent leaders across a full range of U.S. industry sectors and organizational sizes. The report shows that employers believe industry-led external competency frameworks can help create a more fluid market for talent in their industry. Increasingly, organizations rely on analytics and skills-based hiring, believing they will lead to more equitable results in recruiting.'

Mitchell Stevens (Stanford)

- Mitchells Stevens is a sociologists and professor in the School of Education at Stanford, and one of the leaders of the Pathways Lab, and the study of the new science of working learners.
- Beyer (2021) Creating New Opportunities for Working Learners, an interview with Mitchell Stevens.



Q1: Do you see a maturity curve that employers follow when it comes to digital micro-credentials?

Q2: Best strategies for using digital credentials by job seekers? Employers?

Carola Schulz (Empirica)

- Carola Schulz is Research Consultant at Empirica studying at upskilling and reskilling.
- Recent EU Report on Upskilling.



Carola Schulz posted in Expert Group - High Tech Skills for Industry: Fostering New Service Growth and Jobs Creation

Expert Group - High Tech Skills for Industry: Fostering New Service Growth and Jobs Creation

 **Carola Schulz** • 1st
Research Consultant at empirica Communication and Technology Research
1w • 

Thanks to this great community for supporting is in this work!

 **Carola Schulz** • 1st
Research Consultant at empirica Communication and Technology Research
1w • 

Hot off the press! We are honoured to announce our final **#skills4industry** report <https://lnkd.in/g/FH6zCQN> ! Thanks to **Yassi Moghaddam Jim Spohrer** from **International Society of Service Innovation Professionals (ISSIP)** and **Laurent Probst** from **PwC** for creating this work with us at **empirica Communication and Technology Research** - **Tobias Hüsing** **Werner B. Korte** **Alexander Cuartas-Acosta** ! Thanks to all our experts in skills and service science who provided their input!



Q1: Do you see a maturity curve that employers follow when it comes to digital micro-credentials?

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Tim Aldinger (CA Community Colleges - CCC)

- Tim Aldinger is Executive Director of Workforce Development at the Foundation for California Community Colleges. Aldinger leads ... work-based learning opportunities for high school and college students to help improve workforce readiness.
- Aldinger (2021) Foundational Tools To Improve Workforce Readiness



Q1: Do you see a maturity curve that employers follow when it comes to digital micro-credentials?

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Ken Eisner (Amazon)

- [Ken Eisner](#), Global Lead, AWS Educate, Amazon Web Services
- “To meet the moment, we need public-private partnerships between education, industry, and policymakers that speeds access to new curriculum and hands-on opportunities for the workforce. This includes empowering workers to obtain stackable industry an academic credentials, moving ownership of education into the learners’ hands and encouraging lifelong learning.”
- “We're at day one of this shift. Reskilling and upskilling require a mindset that values speed, iteration and collaboration between industry and education.” ([Ref](#))



Q1: Quantitative value of digital credentials? How to know which to get to aim at best paying jobs?

Q2: Best strategies for using digital credentials by job seekers?

Startups to keep an eye on...



[SkyHive](#) ([Sean Hinton](#))



[Knack](#) ([Guy Halfteck](#))



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Jim Spohrer

<https://www.linkedin.com/in/spohrer/>