Management & IS Department Chair's Report, Fall 2020

prepared for the Spring 2021 IT Alliance Zoom Meeting 8:00-9:30 a.m., Friday, April 30, 2021





Romain College of Business

I would like to take this opportunity to thank...

- Alan Letterman, ITA Chair, and Chair-Elect David Smith, for their leadership and continuous support for our CIS and CS Programs and activities.
- It Alliance members, for your valuable, unconditional support for our students and our faculty success. Thanks, again.
- Our students are grateful for your generous ITA scholarships.
- Dean Cathy Carey, for her inspiring leadership and support of our departmental programs and activities.
- Gongjun, Josh, and their CS and CIS students, who worked so hard on the senior projects they presented today.
- My hard-working, dedicated colleagues.





Department News for Fall, 2021

- We have hired a new faculty, Ms. Jiaying Liu, from Louisiana State University, to start this fall. She is ABD and in the final stages of completing her Ph.D. She has expertise in Data Analytics, Database Management, Web Development, and E-Commerce.
- We will begin offering ERP/Sap and ERP/Sim in 8-week accelerated format, as part of the new Online Business Administration Major for adult learners.
- We will also begin offering an 8-week accelerated online format for our Cyber Security & Data
 Analytics for Business certificates--for our students and also for non-degree-seeking students and
 adult learners.
- We are offering a course in Python this summer.
- Our MNGT&IS department is also offering Project Management, and will offer Supply Chain Management, Warehousing and Transportation Management, and Global Supply Chain Management.
- you have any employees who are interested in earning these certificates, please let us know!





2020s: The decade in which artificial intelligence will dominate

- Robots, automation, and artificial intelligence perform now more and more tasks, creating a massive disruption of jobs.
- A wider array of education and skill-building programs must be created to meet new demands.
- American workers need to keep up in the race to use AI tools.
- Eric Schmidt, former CEO of Google, is now Chair of the National Security Commission on AI.
 - --He warns that we are losing dominance in AI to China.
 - --AI will be a \$55 trillion dollar business in the next decade.
 - --The country who dominates AI will be the beneficiary of these vast revenues.









Artificial Intelligence:

Mimicking the intelligence or behavioural pattern of humans or any other living entity.

i.e., Amazon Echo

Machine Learning:

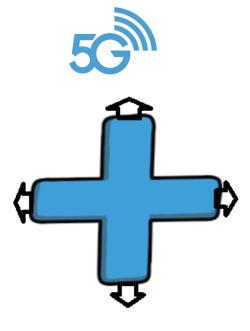
A technique by which a computer can "learn" from data, without using a complex set of different rules. This approach is mainly based on training a model from datasets.

i.e., Google Search

Deep Learning:

A technique to perform machine learning inspired by our brain's own network of neurons.

> Colorizing black and white images by referencing other color images



Cyber security

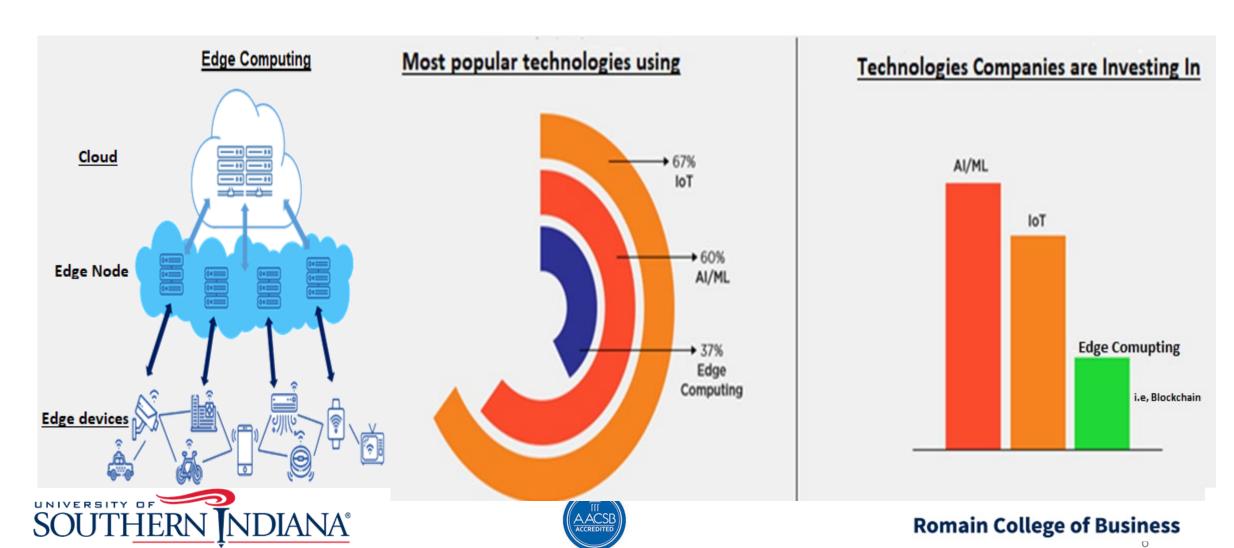






Increasing Popularity of IoT and Al

Several businesses have already adopted AI and IoT as part of their processes and products.



IT Education & Organizational Talent Development for our Region

• The Evansville Regional Business Committee (ERBC) is supporting Talent 2025, spearheaded by Jeff Whiteside, which is collaborating with the EVSC, Ivy Tech, USI and industry to *grow our* community into the talent and economic region of choice in the Midwest.

Talent 2025's findings:

- Our regional strength lies in a manufacturing industry that is increasingly automating processes and using Big Data, robotics, AI, and the Internet of Things (IoT).
- Most organizations are using data analytics to enhance decision making.
- Current manufacturing employees are missing the skills they need to transition.
- There is a growing need for more training in AI, machine learning, data analytics, and programming/coding.
- Universities can play a vital role in bridging skill gaps in adult learners.





How The RCOB's CIS/CS disciplines are developing talent in these areas of needed expertise:

- By integrating AI, coding, machine learning, cyber security, and data analytics into our CS and CIS core requirements.
- By offering Cybersecurity and Data Analytics for Business certificates.
- By examining the possibility of offering Certificates in AI and in Software Engineering for our CS students.

We would like to know what you think about this.

Michelle will now conduct the following poll:

1. Do you think that earning a Certificate in AI would increase our CS graduates' chances of securing a good job at a higher pay level?

Yes or No

2. Do you think that earning a Certificate in Software Engineering would increase our CS graduates' chances of securing a good job at a higher pay level?

Yes or No





Other Issues

- You might be interested to know the results of a survey of our CS students regarding a Certificate in AI.
- Responses from 15 students on a Likert scale:
 - 7 students were very interested. 5/5
 - 7 students were interested. 4/5
 - 1 student was not interested. 2/5
- We welcome more CIS/CS Senior Project proposals.
- Our CIS/CS faculty are very interested in having a planning/discussion meeting with interested ITA members at the beginning of each semester.