

*Teaching with
Data-Driven
Storytelling
Helping Students
Learn How to Work
with Data*

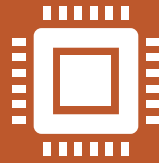
GAMIN BARTLE, DIRECTOR OF INSTRUCTION &
RESEARCH TECHNOLOGY

DAVID FREESTONE, ASSISTANT PROFESSOR,
PSYCHOLOGY AND FACULTY LEADER,
DIGITAL LIBERAL ARTS COLLABORATORY

JAMES MILES, DIRECTOR, DIGITAL LEARNING AND
OUTREACH, COLLEGE OF HUMANITIES AND SOCIAL
SCIENCES

EDGE.CON 2020

Presenters



Gamin Bartle, Director of Instruction & Research Technology



David Freestone, Assistant Professor,
Psychology and Faculty Leader, Digital
Liberal Arts Collaboratory



James Miles, Director, Digital Learning
and Outreach, College of Humanities
and Social Sciences

The problem: Our students are not future-ready

44%



Percentage of students surveyed who felt digitally "well-prepared" or "very prepared" for entry-level positions

Percentage of surveyed employers responded that students are digitally prepared for entry-level positions

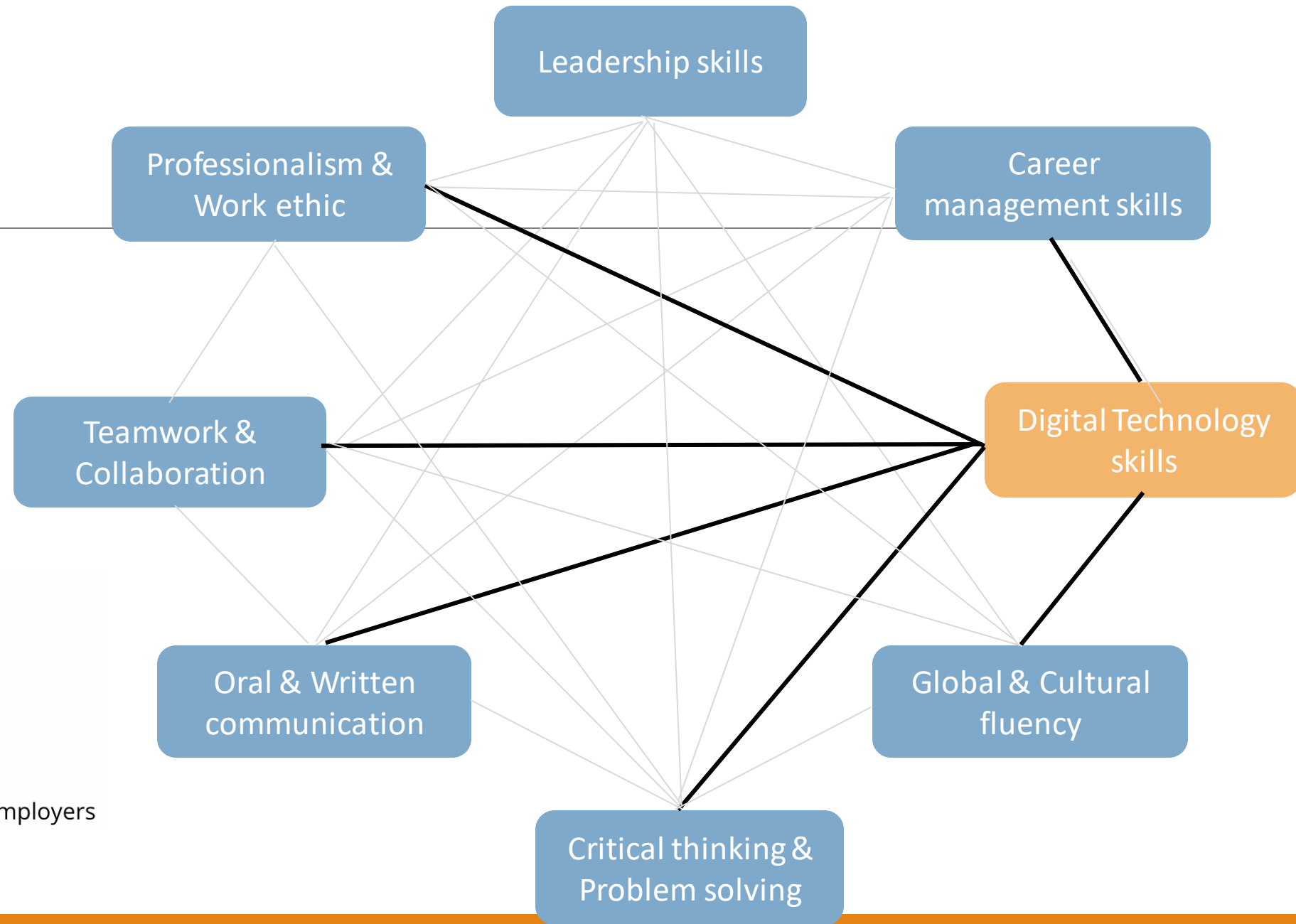


18%

Students
Dread Data!



Career Readiness



National Association of Colleges and Employers



How colleges are preparing students for jobs that don't exist yet

Making Sen\$e Dec 6, 2018 3:58 PM EDT

<https://www.pbs.org/newshour/economy/making-sense/how-colleges-are-preparing-students-for-jobs-that-dont-exist-yet>

THE AGE OF THE NEW-COLLAR WORKER

IBM Community College Skills Accelerator Skills Accelerator Roadmaps IBM New Collar Jobs

Building New Collar Skills for Employment

Our program provides faculty and staff access to IBM technical offerings and education that prepares students for new collar roles.

Follow #ibmskills and #newcollar, and #NewCollarJobs

New technologies mean new opportunities.

Learn about how you can prepare your students for roles in rapidly growing tech fields

TECHNOLOGY

A New Kind of Tech Job Emphasizes Skills, Not a College Degree

Sean Bridges, 25, a cybersecurity analyst for IBM in Rocket Center, W.Va. "I got one big break," he said. "That's what I needed." Mark Ovaska for The New York Times

By Steve Lohr

June 28, 2017

Forbes

Billionaires Innovation Leadership Money Business Small Business Lifestyle Lists Advisor

5,429 views | Jan 24, 2019, 08:11am

New-Collar Workers- Who Are They And How Are They Contributing To Our Labor Shortage?

Scholley Bubenik Former Contributor @Entrepreneurs
I write about hiring, employee engagement, retention and development.

TWEET THIS

companies are considering employing a new set of workers referred to as "new-collar workers".

A shortfall of two million workers is predicted.

Skills in Demand

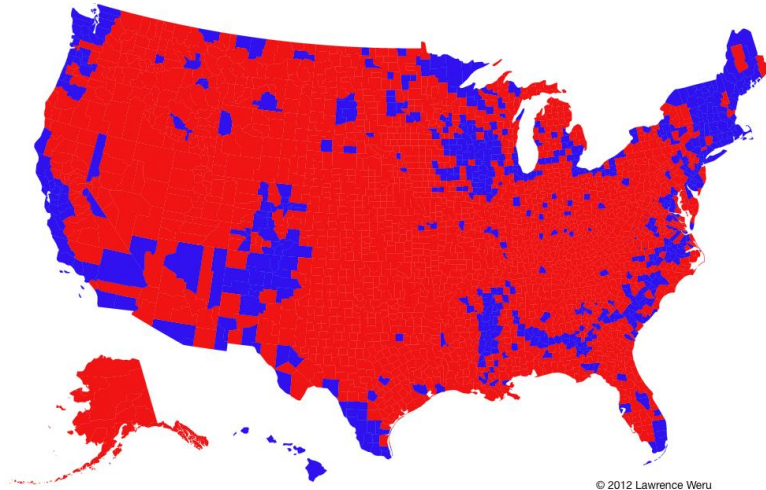
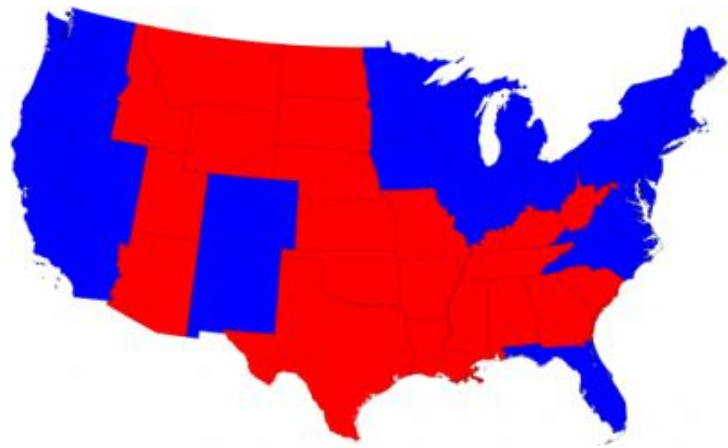
Researchers at LinkedIn create an annual ranking of the skills most in demand. The most sought-after skills in the United States in 2016 were all tied to technology. In addition to those so-called hard skills, job retraining efforts often include the development of soft skills.

HARD SKILLS

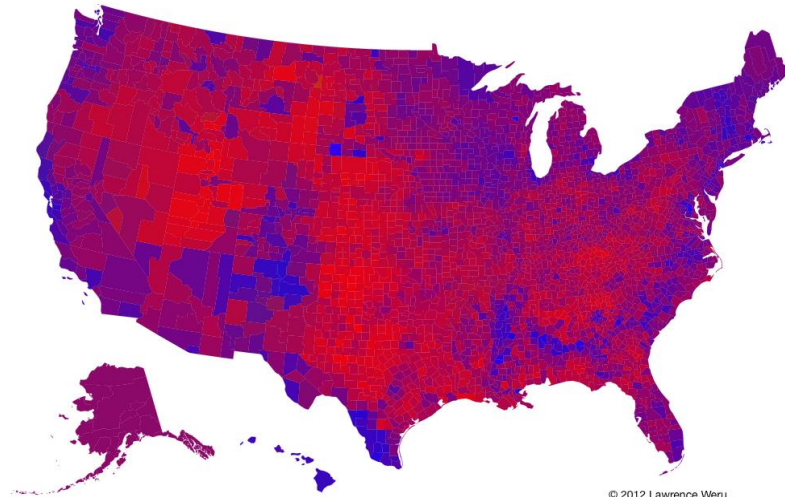
- **Cloud Computing Expertise**
- **Data Mining and Statistical Analysis**
- **Smartphone App Development**
- **Data Storage Engineering and Management**
- **User Interface Design**
- **Network Security Expertise**

SOFT SKILLS

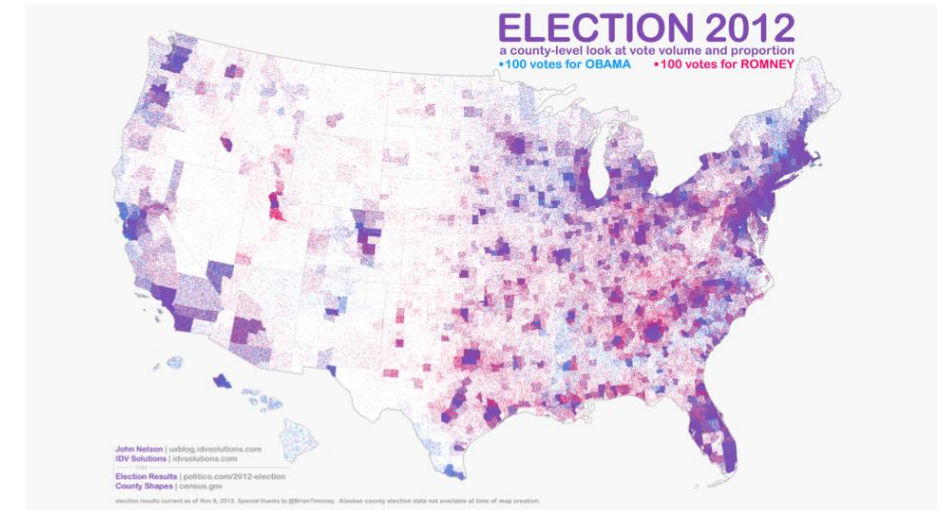
- **Communication**
- **Curiosity**
- **Adaptability**
- **Teamwork**
- **Empathy**
- **Time Management**
- **Open-Mindedness**



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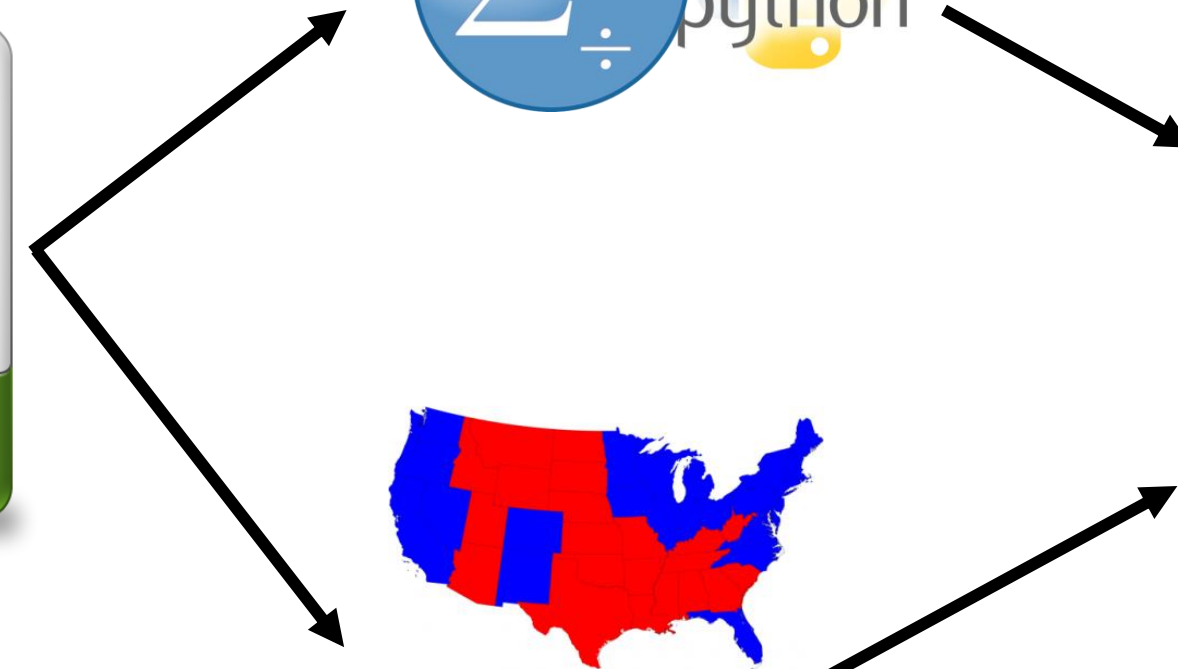
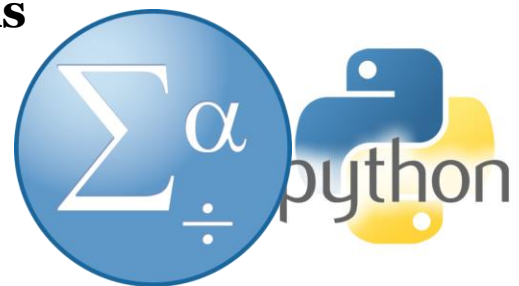


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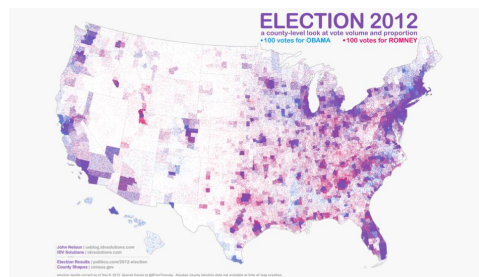
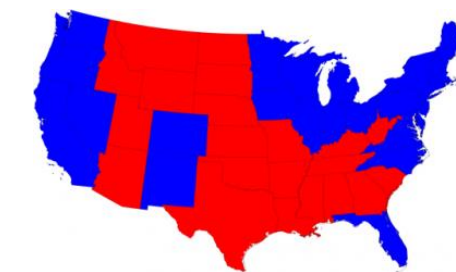


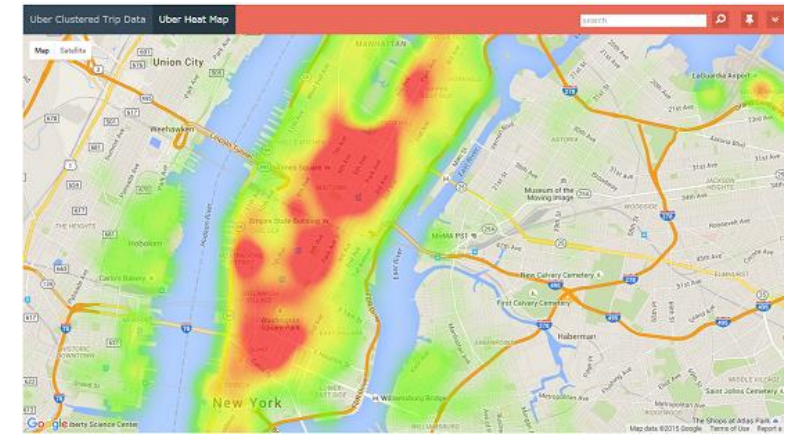
"Data is neither good nor bad but the problem make it so"
- Shakespeare, probably.

Analysis



Visualization





My attempts (yours may be better)

Data Visualization

Data Analysis

Short (1 week)

Research Article

Why Do People Tend to Infer “Ought” From “Is”? The Role of Biases in Explanation

Christina M. Tworek¹ and Andrei Cimpian^{1,2}
¹Department of Psychology, University of Illinois at Urbana-Champaign, and ²Department of Psychology, New York University

PSYCHOLOGICAL SCIENCE

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Medium (2-4 weeks)



Long (4+ weeks)

Research Article

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Christina M. Tworek¹ and Andrei Cimpian^{1,2}
¹Department of Psychology, University of Illinois at Urbana-Champaign, and ²Department of Psychology, New York University

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History survey
course



Shamans, witches,
and magic



Data Visualization

Data Analysis

Short (1 week)

Medium (2-4 weeks)

Long (4+ weeks)

100%



Percentage of William Paterson University students who are digitally "well-prepared" or "very prepared" for entry-level positions

Percentage of employers who agree that William Paterson University students are digitally prepared for entry-level positions



100%

WPU Students, Future-ready!





THANK
YOU