The Design and Outcomes of the National Data4Good Competition: A Pathway to Student Career Readiness



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ABSTRACT

The 4th Annual National Data4Good Case Competition is now underway-bringing together students nationwide to apply data, AI, and analytics for meaningful social impact. This year's challenge offers not only major cash prizes, but also the chance to earn industry-recognized certifications and digital badges that strengthen career readiness. With a compelling, real-world case and a vibrant national community of future data leaders, now is the perfect time to get your students registered and making a difference through data!

INTRODUCTION

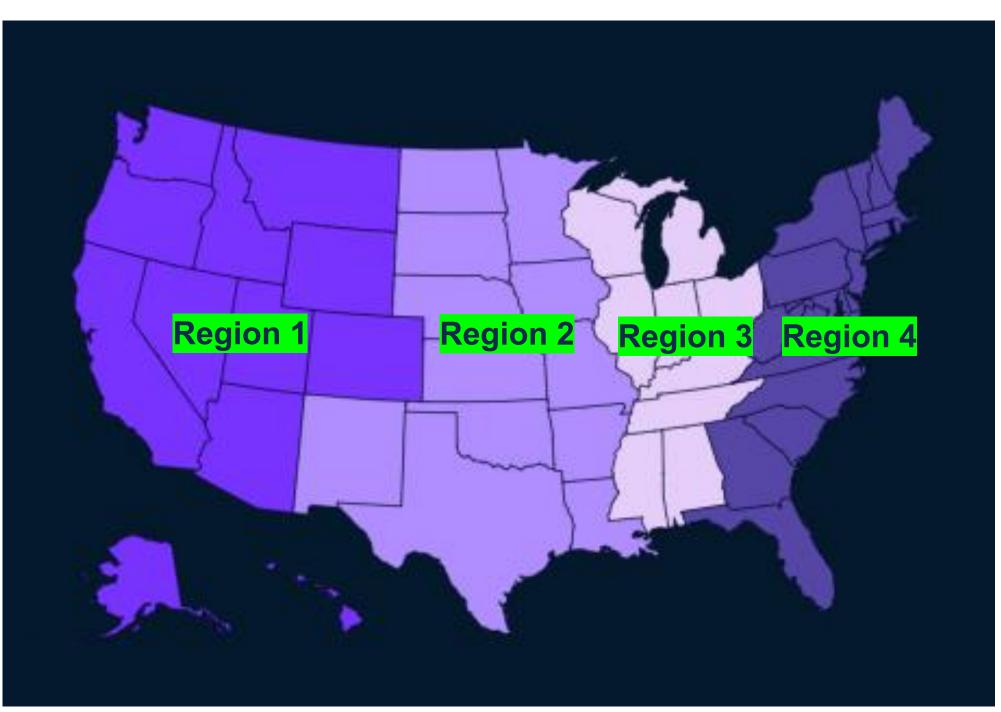
The National Data4Good Case Competition was founded in 2022 by Professor Matthew Lanham to empower students to apply data analytics, AI, and problem-solving skills toward meaningful social impact. Designed as a holistic, experiential learning opportunity, the competition equips students with technical training, industry frameworks, and structured mentorship while challenging them to address real issues faced by nonprofit and socialgood organizations. Each year, teams of undergraduate and graduate students from across the nation complete bootcamp-style training, earn points through progressive deliverables, and compete for regional and national recognition.

BEGINNING WITH THE END IN MIND

- ✓ All participants will have tangible outcomes to showcase their knowledge, skills, and abilities
- ✓ It is more than a case competition
- ✓ Professional training and engagement from our professional (e.g., INFORMS) and tech communities (e.g., Microsoft, SAS)
- ✓ Opportunities for certifications and badges
- ✓ Aligns with data analytics programs missions and needs
- ✓ "Good" case problems they might not otherwise consider in their courses or programs

DESIGN

✓ Regional Champions matter!



- ✓ It's a points-based competition
- ✓ Teams of 3-4 students by degree level (BS or MS)
- ✓ FREE registration



The Seven Domains of Analytics Covered in the INFORMS Analytics Framework

DOMAIN I	DOMAIN II	DOMAIN III	DOMAIN IV	DOMAIN V	DOMAIN VI	DOMAIN VII
Business Problem (Question) Framing	Analytics Problem Framing	Data	Methodology (Approach) Framing	Analytics/ Model Development	Deployment	Analytics Solution Lifecycle Management

HISTORICAL OUTCOMES

Year	# Schools Represented	# Students	# Teams	# MS Certified	Prize Money (\$)	Case Challenge
2022	35	~500	171	608	\$25,000	Children's Book Captioning
2023	72	1031	290	693	\$45,000	Healthcare
2024	36	931	172	652	\$40,000	Grief Assistance
2025	TBD	TBD	TBD	TBD	\$16,000	AI prompts with Context

- 96% considered themselves to be moderately to extremely knowledgeable of AI after this competition
- 86% considered themselves to be moderately to extremely knowledgeable of Microsoft Azure AI services after this competition
- 92% believed this competition helped fill a knowledge, skill, or ability gap that they could showcase to employers
- 87% said they would "probably" or "definitely" discuss this competition work in a future interview to highlight their analytics skills
- 89% believed this competition was worth the time and money invested

TIMELINE

Historically have started right after Labor Day weekend. Based on feedback from faculty and the INFORMS MAPD group we started later in mid-October for 2025. We also will extend into the beginning of Spring semester 2026.

Regional Championship Events: Each Event Counts for Points

Launch Date	Event	Deadline	Link	Individual points (max)	Team points (max)	Percent
10/17/2025	Competition Kickoff! (Webinar)	11/14/2025	<u>Join</u>	250	750	4.67%
Can begin anytime	Team Registration Window	10/31/2025	Register	N/A	N/A	N/A
10/31/2025	The INFORMS Analytics Framework (IAF): The Proven Guide to Developing Analytics Solutions (Webinar)	11/31/25	<u>Join</u>	250	750	4.67%
11/10/2025	Mastering Al-900: Microsoft Azure Al Fundamentals Training (3 hours Webinar)	12/10/2025	<u>Join</u>	250	750	4.67%
11/14/2025	Unlocking SAS Academic Resources (Webinar)	12/14/2025	<u>Join</u>	250	750	4.67%
10/31/2025	Business Problem Framing Free Course (code to take course for free will be shared on 10/31/2025)	12/24/2025	Complete	250	750	4.67%
12/5/2025	Using "The Hero's Journey" in data and Al (Webinar)	12/20/2025	<u>Join</u>	250	750	4.67%
Can begin anytime	Complete Al-900: Microsoft Azure Al Fundamentals Certification Score	12/8/2025	Register to take exam	1000	3000	18.69%
Can begin anytime	Complete SAS Badge (pick one among two available tracks)	12/31/25	Complete	850	2550	15.89%
Can begin anytime	Case Challenge Submissions	1/11/2026	Solve Case	2000	6000	37.38%
			Total	5350	16050	100.00%

National Championship: Regional Champs Present in Person at JHU



Date	Event
1/13/2026	Regional champions announced - top scoring undergrad/grad teams by region (8 total teams) invited to
	The Johns Hopkins Carey Business School
	Final presentations at
1/31/2026	
	The Johns Hopkins Carey Business School



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