

# *National Data Mine Network*

## Student Welcome Call

08/23/2023

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The Data Mine



# *National Data Mine Network (funded by NSF)*



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Director of The Data  
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Purdue University

# AGENDA

What we will cover today

Overview: ASA & The Data Mine

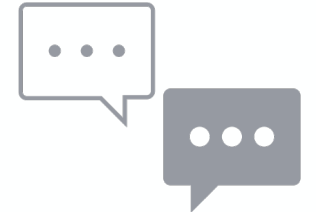
National Data Mine Network (NDMN)

Key Resources

What success looks like in NDMN

Next steps

Q&A





The American Statistical Association (ASA) has secured a three-year grant from the National Science Foundation to establish a National Data Mine Network.

**Goal:** To increase access to advanced data science education, research, and industry collaborations for underrepresented student groups.

ASA has partnered with Purdue University to expand on Purdue's esteemed Data Mine Program. This collaboration leverages Purdue's strong infrastructure to benefit both organizations, offering 100 research stipends each year at minority-serving institutions across the nation.



Dr Donna LaLonde  
Associate Executive Director



Kristin Mohebbi  
Manager,  
Office of Executive Director

# *National Data Mine Network*

Funded by NSF

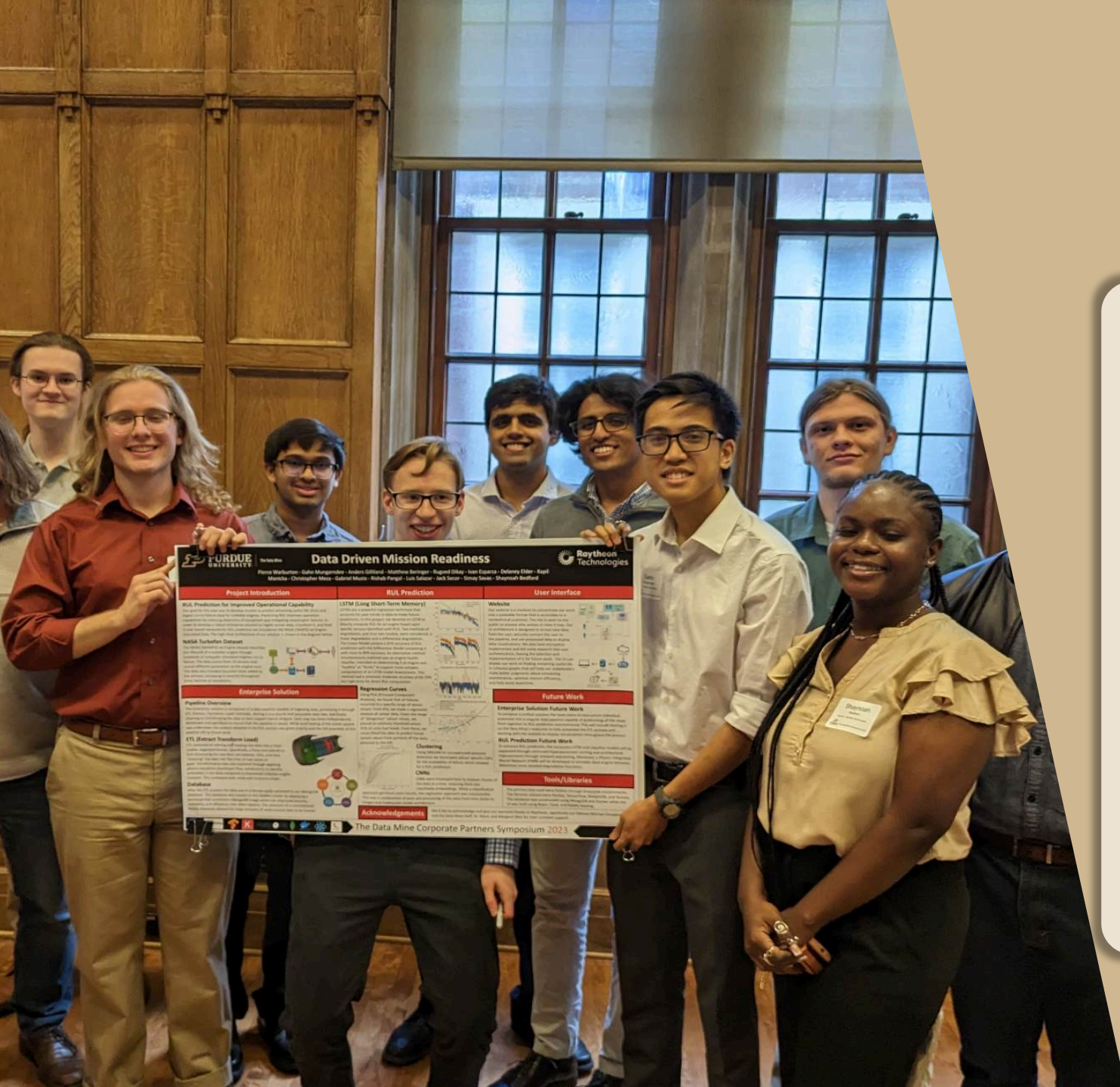


- 3-year grant funding by the National Science Foundation
- Focused on 100 undergraduate students per year at Minority Serving Institutions
- Research stipends for 9-months of participation in weekly data science & corporate partner projects
- Students have access to data science training, materials, and high-performance computing
- 100% virtual teams
- Collaboration between Purdue and the American Statistical Association



# *THE DATA MINE*

- Living & Learning Community
- All Majors Welcome
- Data Science for All!
- Experiential Learning
- Real-Data & Real-World Challenges



# 2022 - 2023 Corporate Partners

 The Aerospace Corporation	 Allison Transmission	 ATOM	 We create chemistry BASF	 Battelle	 Bayer Crop Sciences	 Beck's Hybrids	 Boeing	 A Division of the American Chemical Society CAS	 CENTERS FOR DISEASE CONTROL AND PREVENTION CDC PROTECT
 Central Insurance	 City of Lafayette	 Co-Alliance	 Cook Medical	 DORIS	 Elanco	 FHI	 FSSA	 Helmer Scientific	 Howmet Aerospace
 Ingenii	 Inogen	 analyze. answer. advance. Inotiv	 IntelinAir	 IU Health	 John Deere & Company	 Lockheed Martin	 Mara Elephant Project	 Merck	 Microsoft Minecraft
 MISO	 Molecular Stehoscope	 Mursix	 Nationwide	 No Limit Living, LLC	 Nuvve	 Pacific Life	 Pebblst	 Pistoia Alliance	 Purdue Athletics
 Purdue Biomedical Engineering	 Purdue Data Mine Black Studies	 Purdue EAPS	 Purdue MFRI	 Purdue Office of Engagement	 Purdue Ray Ewry Sports Engineering Center	 Purdue Office of Supplier Diversity	 Purdue Student Life	 Raytheon Technologies	 Renzoe Box
 Sandia National Lab	 SIA	 Tesla	 Unnamed Retailer	 USAA	 USDA Forest Service	 Viasat	 Wabash	 Webee	 Yamaha Precision Propellers
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# *The Data Mine Staff*

datamine@purdue.edu



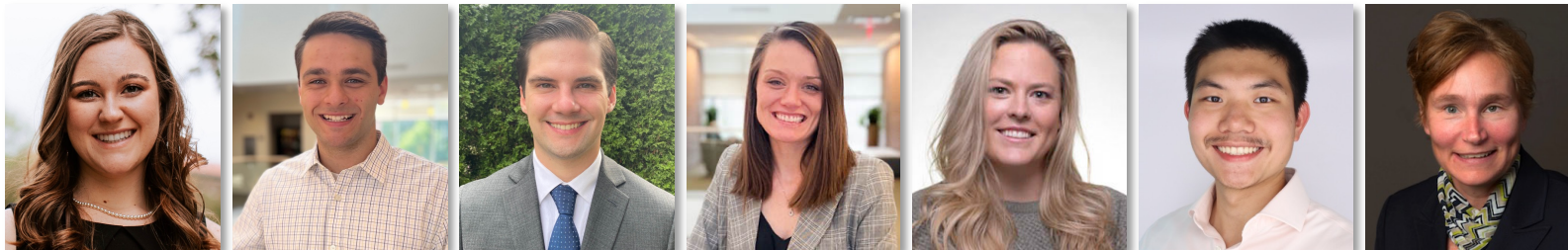
## Academic Programs, Outreach, & Expansion



## Operations



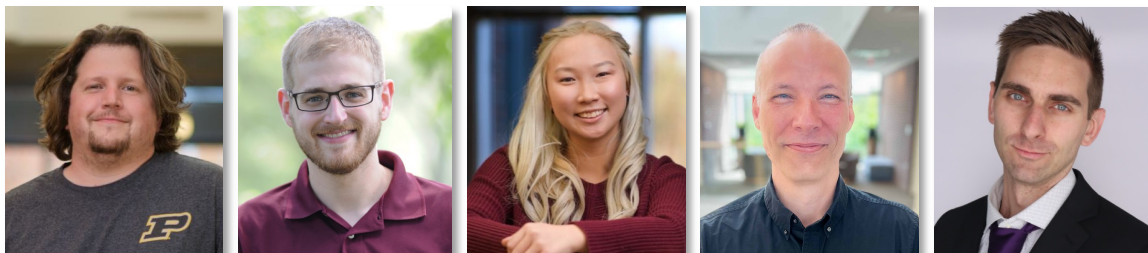
## Corporate Partners



## ASL Interpreter



## Data Science & Technology



## ASL Instructor



## Program Director





# The Data Mine Staff

datamine@purdue.edu



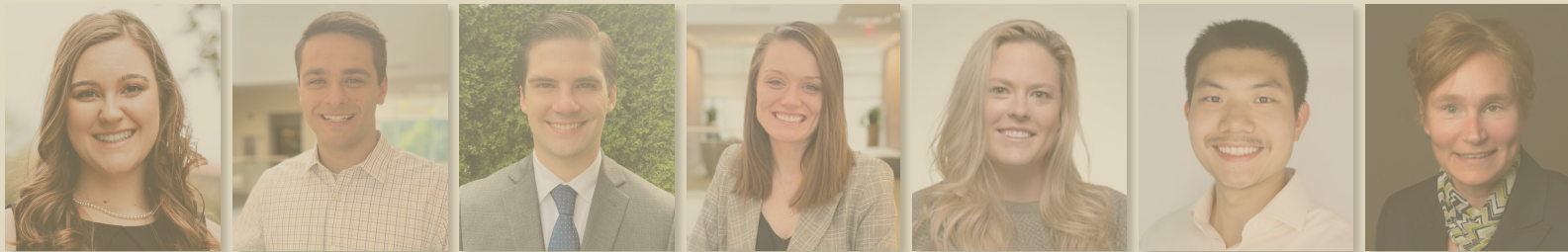
## Academic Programs, Outreach, & Expansion



**Jessica Jud**

[jljud@purdue.edu](mailto:jljud@purdue.edu)

## Corporate Partners



## Data Science & Technology



## Operations



## ASL Interpreter



## ASL Instructor



## Program Director



# *National Data Mine Network: Program Overview*

## **ALL: SEMINAR (TDM 10100)**

- Hands-on experience through weekly data science projects
- 1-3 hours per week of work
- Topics include: R, Python, SQL
- Projects are released on Thursday and are due the following Friday
- Virtual session to ask questions directly with Dr Ward (4pm ET; Mondays)
- Online community via Piazza for Seminar help & Online TA Office Hours
- Starter Guides

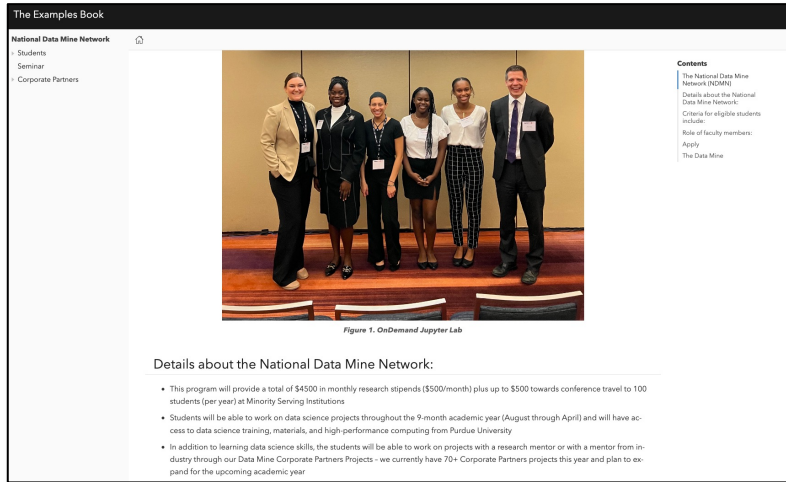
## **MANY: CORPORATE PARTNERS**

- Experiential data-driven project work with Corporate Partner Mentors from August - April
- Meet two times per week with mentor and/or project team
- Agile Project Management with 2-week sprints
- MS Teams for communication & collaboration
- TA & Corporate Partner Advisor to provide support

## **FEW: RESEARCH**

- Only available to returning students from 2022-2023 cohort
- Working with university mentor on data-driven research
- Monthly sprint reports on research updates & progress
- Required to present at Virtual Symposium in late April/early May

# Key Resources



## The Examples Book

- All Data Mine information is located here
- Main resource for you – make sure to bookmark!



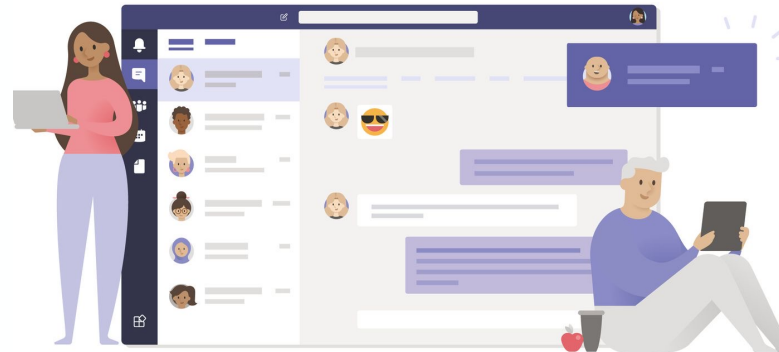
## Gradescope

- Where all seminar projects & sprint reports are submitted

## Piazza

- Online community with all Data Mine students to ask seminar questions

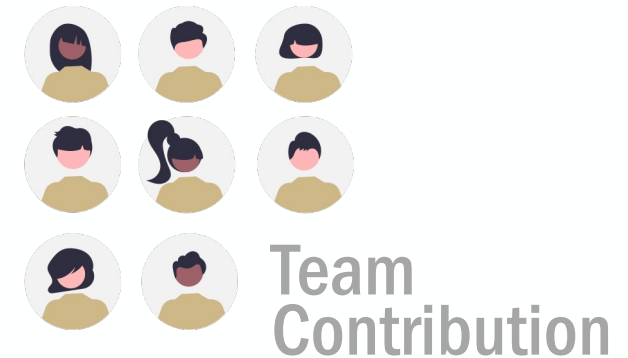
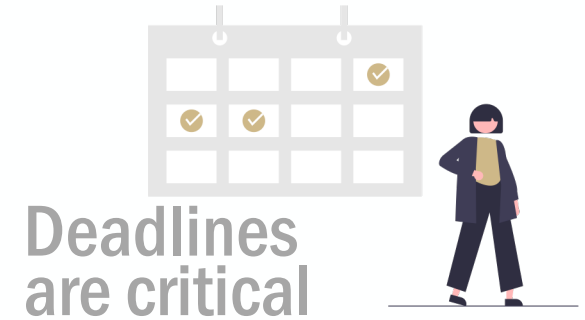
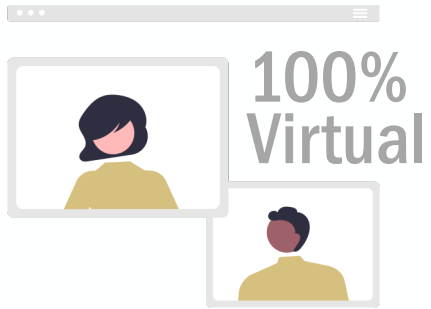
## Microsoft Teams



## ANVIL

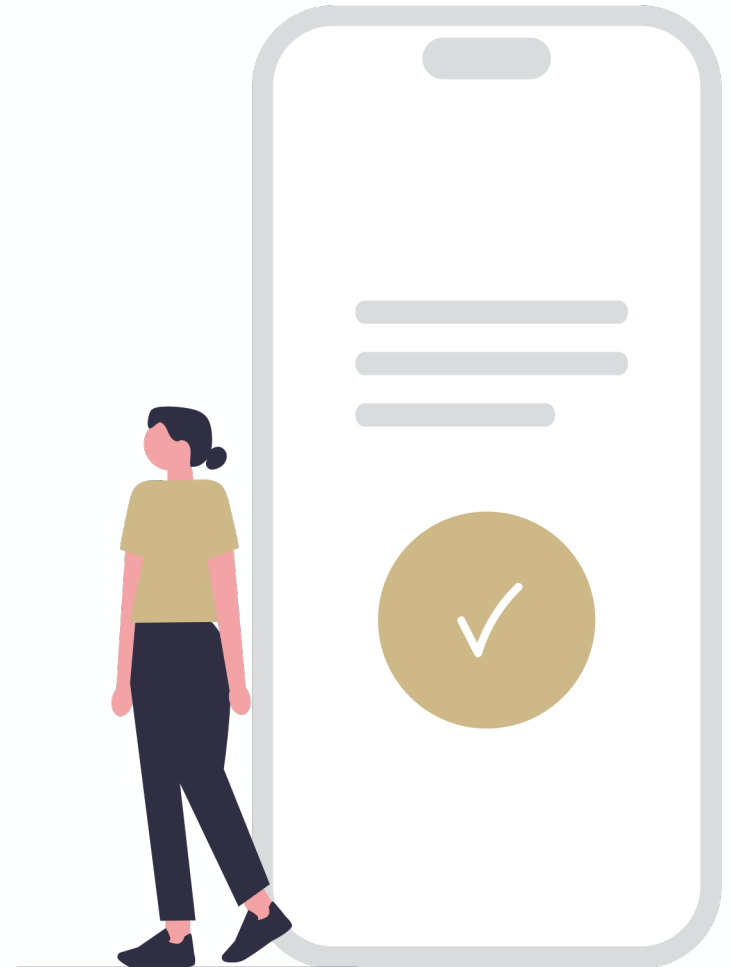
- High-performance computing cluster used for both Seminar & Corporate Partners

# What success looks like in the National Data Mine Network



# ***NEXT STEPS***

- ☑ Set up ACCESS ID (Anvil)
- ☑ Download MS Teams & Firefox
- ☑ Review The Examples Book
- ☑ Check email for stipend information from ASA – first payment will be in September





## 2023 AUCC'S SUMMER BRIDGE



<https://aucenter.edu/>

# *Dr. Talitha Washington*

Director, AUCC Data Science Initiative



# THANK YOU



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