

The National Data Mine Network

Experiential Industry Practicums in Data Science

ABOUT THE DATA MINE

- Data Science for All
- 2,000 students for AY 2024-25
- At West Lafayette Campus:
 - 160+ majors represented
 - 30% female
- ~ 133 students at MSIs in 2023-24
- ~ 120 students at MSIs already for 2024-25
- More than 50 colleges and university partners
- Launch of Purdue Indianapolis office in Jan 2024
- Launch of Data Mine of the Rockies in Aug 2024

SEMINAR (1 CREDIT)

- 1 credit hour per semester
- 8 levels (4 years) + graduate students (M.S./Ph.D.)
- All content in The Examples Book
 - Publicly available at the-examples-book.com
- R, Python, SQL, bash, HPC, TBs of data



Elevance Health student team (Fall 2024)



President Chiang visits students in The Data Mine (Fall 2024)



Corteva student team (Fall 2024)



Data Mine Teaching Assistants (Fall 2024)

CORPORATE PARTNERS

- Undergraduate and graduate students from all majors and computing backgrounds work in teams directly with partners in industry
- Teams of 5-15 students collaborate on data intensive projects via experiential learning
- Students are mentored by industry professionals during weekly team meetings
- Teams are led by a paid team leader (typically an undergraduate student)
- Students earn 3 credit hours per semester and spend 8-10 hours per week working on the projects
- Projects last entire academic year (August – May)
- ~80 AY 2024-25 projects covering many domains:
 - Digital agriculture
 - Aerospace
 - Manufacturing
 - Life sciences
 - Pharmaceutical Science / Drug Discovery
- All projects conclude with a poster presentation at The Data Mine Corporate Partners Symposium



The Data Mine Seminar (on-site)

STUDENT QUOTES

I ended up exchanging a few emails with you and your enthusiasm and encouragement was particularly infectious. I can't tell you how many times I used the examples book and so many of the data mine resources, and had great experiences during Datafest where I learned so much as well.

I consider that conversation ... as a weirdly pivotal point in my journey. I think it made me realize that my aspirations weren't actually beyond me in the way that I thought that they were. I graduated this past May with a BS in Economics with a concentration in Data Analytics and also a BA in Political Science. As I've moved into the beginning of this next chapter... I just have felt compelled to thank some of the people who helped a highschool dropout get to a point in his life where he is positioned to start his career.



Dominican University – New York student team (2023-24)

GRANTS

- \$10 million Lilly Endowment grant for expansion within Indiana
- \$1.5 million NSF grant for MSI students nationwide
- \$750K Convergence Accelerator grant for Deaf and hard of hearing students



List of Corporate Partners (2023-24)



Students visit Yamaha in Greenfield, IN (Fall 2023)

RESOURCES & MEDIA

Homepage: datamine.purdue.edu
 Email: datamine@purdue.edu
 The Examples Book: the-examples-book.com
 Introducing The Data Mine video: https://youtu.be/R_kqplMyhR4
 Statewide Lilly Endowment grant in IN: www.purdue.edu/newsroom/releases/2021/Q2/purdue-to-launch-indiana-digital-crossroads-with-10-million-grant-from-lilly-endowment.html
 NSF Grant for MSIs: <https://beta.nsf.gov/science-matters/developing-21st-century-data-science-workforce>

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annual Data Mine Corporate Partners Symposium (April 2024)



Students visit Beck's Hybrids in Atlanta, IN (September 2024)



Students at new Data Mine Indianapolis office (Fall 2024)