





MASTER OF A P P L I E D D A T A S C I E N C E EMPLOYMENT R E P O R T







About this report

The University of Michigan School of Information (UMSI) Career Development Office surveys our graduates to identify their post-graduation plans and outcomes. This report summarizes outcomes from 2022 UMSI-MADS (Masters of Applied Data Scientce) graduates who completed the survey by the deadline or for whom a known outcome was reported in other ways. Of the 238 MADS students who graduated in 2022, 135 (57%) responded to the survey or reported their outcome in other ways. It is important to note that MADS students participate in this online program from around the world, bringing in a variety of experiences, as well as goals for participating in this program i.e., career advancement/promotion, new job, new field, skill development, salary boost, etc.



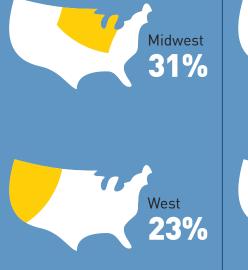
Average salary reported for all respondents who indicated they had accepted a new job in the data science field.

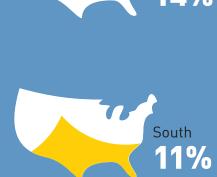


Average salary increase for respondents who received a promotion or advancement with their current employer as a result of their MADS degree.

Northeast

Where our graduates are working







International students job locations

| Canada | 7 | South Korea | 2 |
|---------------|---|--------------|---|
| England | 4 | Australia | 1 |
| United States | 4 | China | 1 |
| India | 3 | Costa Rica | 1 |
| Egypt | 2 | Japan | 1 |
| Hong Kong | 2 | South Africa | 1 |
| Singapore | 2 | Taiwan | 1 |

Most MADS international students accept new data science jobs in their respective home countries. Value of UMSI courses

95%

of respondents indicated that the MADS curriculum was relevant to their job outcome or meeting career advancement goals.



of respondents indicated that they were satisfied or extremely satisfied with their job outcome in terms of ideal fit and/or in meeting career advancement goals

Top industries our graduates are working in



Technology 26%



Financial services/ insurance



Manufacturing 15%



Consulting 13%



Health/medicine 5%



University/college 40/1



Government 3%



Consumer goods & services



Education 2%



Energy 2%



Entertainment/sports
2%



Marketing/design agency



Nonprofit/NGO



Start-up/ entrepreneurial



Travel/delivery 2%



Aerospace/defense

Salaries by top industries



\$90K
Financial services/
insurance

Specific to respondents who indicated they had accepted a new job in the data science field.

Most valuable UMSI experiences for job outcome

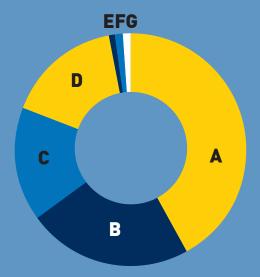
- Milestone and capstone courses
- Supervised/ unsupervised learning



Average job search length

Specific to respondents who indicated they had accepted a new job in the data science field.

Job search status



| 42% | A | I have accepted a new job. |
|-----|---|----------------------------|
| | | |

23% **B** I have accepted a promotion or job advancement with my current employer

16% C I am currently employed and do not plan to job search at this time

16% D I am currently employed and plan on pursuing advancement/or have moved into an advanced role with my current employer.

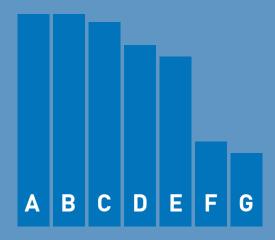
1% **E** I am still job searching for a data science position.

1% **F** I am starting my own business.

1% **G** I am continuing my education.

What matters most: critical factors for job decision-making

Respondents selected multiple choices



| A | | | r | | / | | |
|----------|---|---------|----|------|----|----|----|
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B Salary

C Nature of the job

D Company culture

E Advancement opportunities

F Type of company/specific company

G Industry

Salaries by region







Regions without enough data to report:

- South
- International

Relevance of curricular experiences

93%

of our graduates say UMSI curricular experiences were relevant to success/ iob outcome

Most effective job search methods

Specific to graduates who were seeking new jobs in the data science field

- > Company web site
- National job boards (Linkedin, Indeed.com)
- > Contacts/networking
- > UMSI CDO resources

Most valuable SKILLS gained at UMSI for job outcome

Respondents selected multiple choices

Problem solving/critical thinking

Technology

Research
Project management
Collaboration/group work/team
Communications

Number of responses

15

16

12

11

11

11

Most valuable TECH SKILLS gained at UMSI for job outcome

*SQL, Python, including Pandas, Data Visualization rated as most valuable tech skills gained

Respondents selected multiple choices

Data mining, management, visualizations & applications

Programming

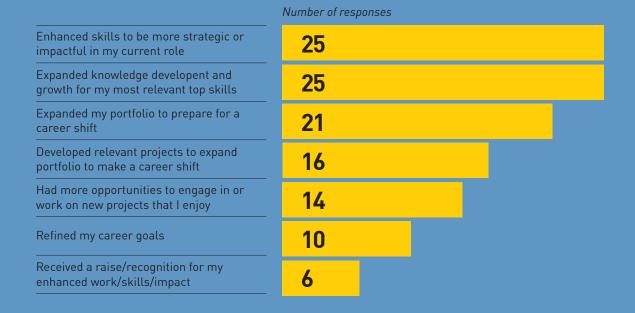
Machine learning & natural language processing

Statistics & math

19

Greatest impact of MADS program on career advancement goals

Respondents selected multiple choices



Greatest impact of MADS program on future career outlook

Respondents selected multiple choices

| | Number of responses |
|---|---------------------|
| Discovered new career opportunities | 22 |
| Enhanced skills to be more strategic or impactful in my career | 19 |
| Identified skills to develop for my aspirational role | 19 |
| Refined my career goals | 17 |
| Expanded my professional network | 17 |
| Had more opportunities to engage in or work on new projects that I enjoy | 13 |
| Expanded knowledge development or application for my top skills | 13 |
| Expanded my portfolio to prepare for a career shift | 10 |
| Started a new role in the data science field | 9 |
| Identified a direct path towards promotion to advance my career at my company | 6 |
| Contributed to a business case for a raise | 4 |

2023 Job Outcomes

*Asterisk indicates international student

Aerospace/defense

| Sr Principal Cyber Systems Engineer | Northrop Grumman, VA, USA |
|--|---------------------------|
| 2.19.1.00. | |

Consulting

| Consulting | |
|---|--|
| Data Scientist | Andela, NY, USA |
| Data Scientist | Arcadis, MI, USA |
| *Sr Data Consultant | Artefact, England |
| Sr Consultant Data Scientist | Booz Allen Hamilton, CA, USA |
| Business Intelligence Analyst | Concentrix, TN, USA |
| *Senior Analyst | Deloitte, India |
| Consultant II, Data Analytics and Visualization | ERM, TN, USA |
| Data Scientist II | LexisNexiis Risk Solutions, MN, USA |
| Product Manager, EVOPT | Microgrid Labs Inc, CO, USA |
| Data Analyst | NTT Data, NC, USA |
| Senior Tech Consultant | Plante Moran, MI, USA |
| * Data & Tech - Experienced Associate | PwC, NY, USA |
| Data Scientist | Redhorse Corp, FL, USA |
| Data Scientist | Splash Analytics, FL, USA |
| Sr Data Scientist | TriNet, CA, USA |
| Research Scientist | Verint, NY, USA |

Consumer goods & services

| Decision Scientist | Ibotta, Inc., CO, USA |
|----------------------|-----------------------|
| Insights Manager | Nike, OR, USA |
| Analytics Manager II | Supply Chain, OR, USA |

Education

| Data Science Instructor | Le Wagon |
|---------------------------------|---------------------------|
| Assistant Director for Faculty, | Mount Saint Mary Academy, |
| Curriculum, and Planning | NJ, USA |

Energy

| Data Analyst III | Consumers Energy, MI, USA |
|------------------------|---------------------------|
| Data Scientist | Consumers Energy, MI, USA |
| *Middle Office Analyst | Mabanaft UK, England |

Entertainment/sports/gaming

| *Data Scientist | Amutus, Japan |
|----------------------------|--|
| Sr Business Analyst | Illitch Sports & Entertaubnebt, MI, USA |
| Sr. Product Manager | Philadelphia Phillies, PA, USA |
| Sr. Director, Data Science | Sony Music Entertainment, NY, USA |

Financial services/insurance

| Sr FP&A Analyst | Air T, Inc, MN, USA |
|--|---|
| Data Scientist Senior Consultant I | Allstate, MI, USA |
| AVP Data Engineer | Antares Capital LP, IL, USA |
| *Data Scientist | ANZ, Australia |
| *Data Scientist | Binance, Canada |
| Sr Data Scientist | Capital One, CA, USA |
| Data Scientist | CVS Aetna |
| Data Scientist | Enova International, IL, USA |
| Sr. Enterprise Architect, Cloud & ML, VP | Federal Home Loan Bank of Chicago, IL, USA |
| Data Scientist | Frankenmuth Insurance, MI, USA |
| Data Analyst | GC Services, TX, USA |
| Senior Data Scientist | Jackson National Life Insurance Company, MI, USA |
| Risk Analyst | Morgan Stanley, NY, USA |
| Buyside Risk Manager | Morgan Stanley Asia Limited, Hong Kong |
| Data Scientist Sr. Quantitative Analytics & Model Development | PNC, IL, USA |
| Data Scientist | Qodex, MI, USA |
| *Sr Data Science Manager | Staysure Group, England |
| Analyst | Susquehanna International Group, PA, USA |
| *Data Scientist | TD Canada Trust, Canada |
| Data Engineer | Trinity Investors, TX, USA |

Government

| Application Developer II | Commonwealth of PA, PA, USA |
|----------------------------------|--|
| Technology and reporting manager | DTMB, MI, USA |
| Data Visualization Analyst | State of Michigan, MI, USA |
| Data Scientist | United States Department of Veterans Affairs, PA, USA |

Health/medicine

| *Advanced Business Application Designer | Blue Cross Blue Shield of Michigan, Canada |
|---|---|
| Business Application Expert | Blue Cross NC NC, USA |
| Data Analyst | Community Solutions CA, USA |
| Data Engineer | HC1 MI, USA |
| Database Analyst/Programmer Intermediate | Michigan Medicine MI, USA |
| Data scientist II | Optum MN, USA |
| Senior Scientific Analyst | Relay Therapeutics MA, USA |

Manufacturing

| Data Scientist | Ascend Performance Materials, TX, USA |
|---|--|
| Sr Manager, Digital Analytics | Cambria, MN, USA |
| *Staff Data Scientist | ConocoPhillips, TX, USA |
| Data Engineer | Ford Motor Co, MI, USA |
| Data Scientist | Ford Motor Co, MI, USA |
| Data Scientist | Ford Motor Co, MI, USA |
| Technical Lead Quality Net Promoter Score (QNPS), GDIA | Ford Motor Co, MI, USA |
| Cloud Developer - Software Defined Vehicle | General Motors, MI, USA |
| Data Scientist | General Motors, MI, USA |
| *Jr Data Science Consultant | Henkel, Egypt |
| Data Analytics Engineer | Hyundai, CA, USA |
| *Lead Quality Coordinator | ISCO Industries Inc, KY, USA |
| *Global Associate Director for Reporting & Analytics | Novartis, India |
| Data Scientist | Plastipak, MI,US |
| Lead Data Scientist, Customer & Market Insights | Shure Inc., Hong Kong |
| Staff Data Analyst, Analytics & Strategy | Skydio, CA, USA |
| Data Strategist | STEMBoard, FL, USA |
| Staff Software Engineer | Stryker, MI, USA |
| Data Analyst | Supernal, CA, USA |
| | |

Marketing/Design Agency

| Associate Scientific Solutions | Flywheel, TX, USA |
|---------------------------------------|---------------------|
| Engineer | |
| Director of Addressable Activation | Matterkind, OR, USA |
| Data Analyst | Whalar, NY, USA |

Nonprofit/NGO

| Data Engineer Consultant | Changing Room, CA, USA |
|--------------------------|--|
| Sr Data Analyst | FAIR Health Inc, NY, USA |
| Senior Data Analyst | The Greater Boston Food Bank, MA, USA |

Start-up/entrepreneurial

| Chief of Data Officer | Maker Media, Costa Rica |
|-----------------------|-------------------------|
| Co-Founder | Med Vision.ai |

Technology

| Senior Business Operations | Algolia, CA, USA |
|----------------------------|------------------|
| Analyst | |



Contact the UMSI Career Development Office to discuss your job search, or to receive information on hiring UMSI grads.

umsi.careers@umich.edu

| Sr Program Manager | Amazon, WA, USA |
|--|--------------------------------------|
| AI/ML Startups & VC | Amazon Web Services CA, USA |
| Senior Software Engineer | Apple, CA, USA |
| *Chief Product Officer | Axceta Solutions, Canada |
| Sr Marketing Data Analyst | Coursera, CA, USA |
| Senior Data Scientist - People Analytics | DoorDash Corporate, CA, USA |
| *Senior Data Analyst | Ed Tech.co, China |
| *Al Engineer | Foxconn GIS Technology Co, Taiwan |
| Data Science Engineer | Giant Oak, Inc, VA, USA |
| Principal Data Scientist | Glympse Bio, MA, USA |
| *Data Engineer | GoDaddy, Canada |
| Analytical Lead | Google, MI, USA |
| Business and Marketing Data Scientist | Google, CA, USA |
| Software Engineer | Google, WA, USA |
| Senior Engineer | Latitude Al, MI, USA |
| Sr Data Engineer | LegalZoom, OR, USA |
| Group Product Manager | LinkedIn, CO, USA |
| *Data Engineer | Merquri, Singapore |
| Data Scientist | Microsoft, CA, USA |
| Principal Engineering Manager | Microsoft, WA, USA |
| *Sr Analytics Specialist | MTN, South Africa |
| Data Scientist | NextNav, CA, USA |
| Software Engineer | Polygon Labs, MI, USA |
| Data Science Expert | SAP, TX, USA |
| Senior Data Scientist | SFL Scientific, CA, USA |
| *Data Scientist | Shopify, Canada |
| *Project Leader | SK, Korea |
| *Data Analyst | SK Telecom, Korea |
| Director- Technical Staff Systems Architecture | T-Mobile, TX, USA |
| Pre-Sales Solutions Architect / Scientific Business Analyst | TetraScience, MA, USA |
| Data Scientist | VertexOne, CA, USA |
| Senior Data Scientist | Zywave, NY, USA |

Travel/delivery

| *Analytics Manager | Delivery Hero, Germany |
|--|--------------------------|
| Engagement Manager - Advanced Analytics | United Airlines, MI, USA |

University/college

| Business Analyst | Carnegie Mellon University, PA, USA |
|---------------------------|--|
| Data Scientist | University of Michigan, MI, USA |
| Data Security Analyst | University of Michigan, MI, USA |
| Intermittent Lecturer | University of Michigan, MI, USA |
| Research Cloud Programmer | University of Michigan, MI, USA |