MADS

MASTER OF APPLIED DATA SCIENCE

EMPLOYMENT REPORT

2023

SCHOOL OF INFORMATION
UNIVERSITY OF MICHIGAN

si.umich.edu

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.

$122K

OVERALL AVERAGE SALARY

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

15–20%

AVERAGE INCREASE

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

Where our graduates are working

Midwest **31%**

Northeast **14%**

West **23%**

South **11%**

International **20%**

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.

100% 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
16%

Manufacturing
15%

Consulting
13%

Health/medicine
5%

University/college
4%

Government
3%

Consumer goods & services
2%

Education
2%

Energy
2%

Entertainment/ sports
2%

Marketing/ design agency
2%

Nonprofit/NGO
2%

Start-up/ entrepreneurial
2%

Travel/delivery
2%

Aerospace/defense
1%

Salaries by top industries

$107K
Technology

$90K
Financial services/ insurance

Specific to respondents who indicated they had accepted a new job in the data science field.
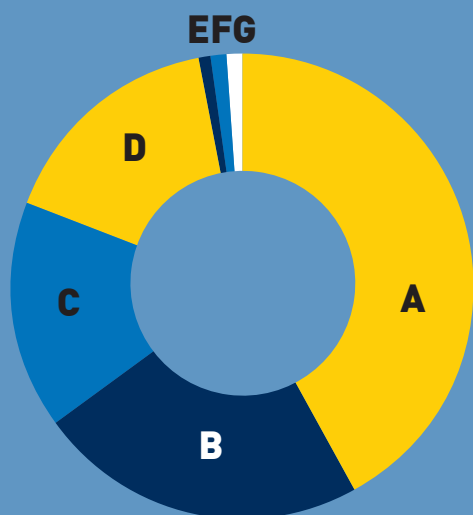
Most valuable UMSI experiences for job outcome

› Milestone and capstone courses
› Supervised/ unsupervised learning

3 MONTHS

Average job search length

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

Job search status

EFG

D

C

A

B

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 B C D E F G
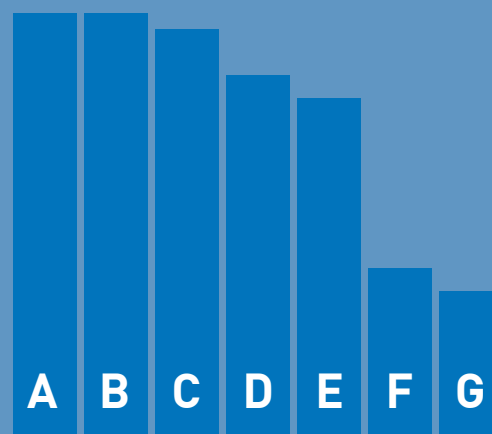
A	Benefits/perks
B	Salary
C	Nature of the job
D	Company culture
E	Advancement opportunities
F	Type of company/specific company
G	Industry

Salaries by region

West
$135K
average salary

Midwest
$95K
average salary

Northeast
$95K
average salary

Regions without enough data to report:
- South
- International

Relevance of curricular experiences

93%

of our graduates say UMSI curricular experiences were relevant to success/job outcome
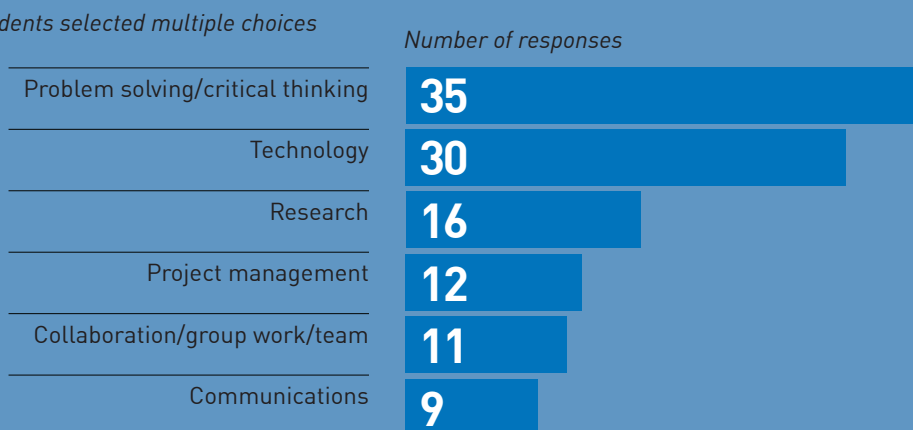
Most effective job search methods

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

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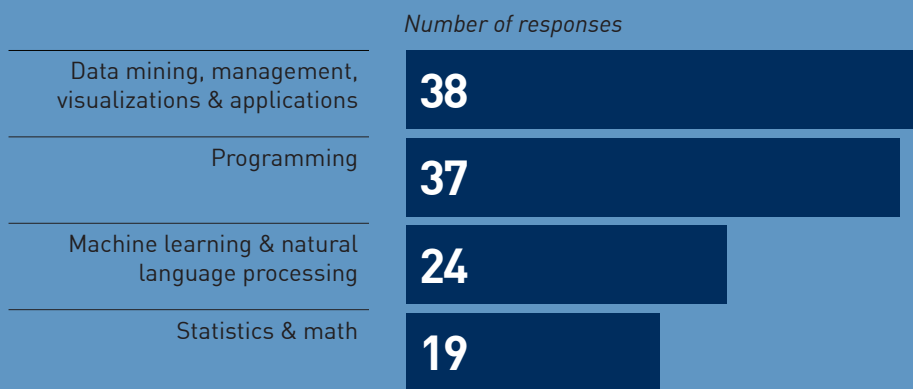> Contacts/networking
> UMSI CDO resources

Most valuable SKILLS gained at UMSI for job outcome

Respondents selected multiple choices

Number of responses

Skill	Responses
Problem solving/critical thinking	35
Technology	30
Research	16
Project management	12
Collaboration/group work/team	11
Communications	9

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
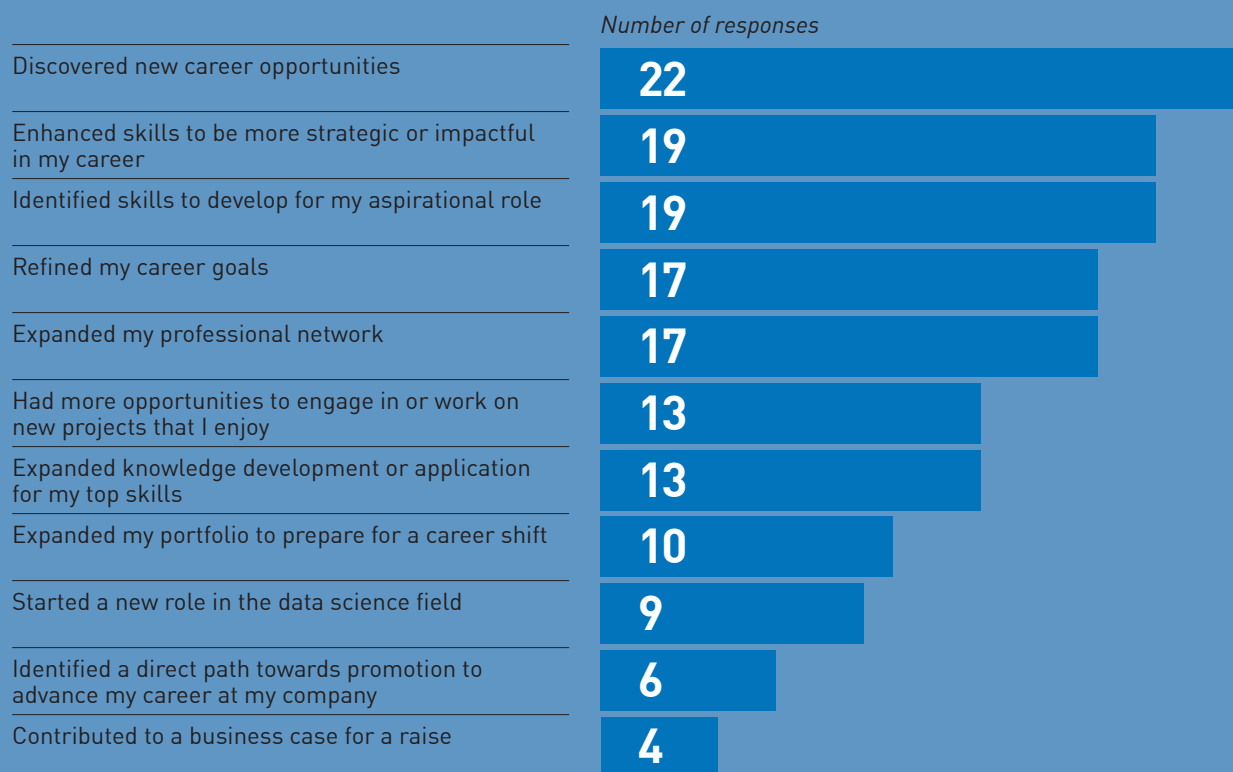
Number of responses

Tech Skill	Responses
Data mining, management, visualizations & applications	38
Programming	37
Machine learning & natural language processing	24
Statistics & math	19

Greatest impact of MADS program on career advancement goals

Respondents selected multiple choices

Number of responses

Enhanced skills to be more strategic or impactful in my current role	25
Expanded knowledge developent and growth for my most relevant top skills	25
Expanded my portfolio to prepare for a career shift	21
Developed relevant projects to expand portfolio to make a career shift	16
Had more opportunities to engage in or work on new projects that I enjoy	14
Refined my career goals	10
Received a raise/recognition for my enhanced work/skills/impact	6

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

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, Curriculum, and Planning	Mount Saint Mary Academy, 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 Engineer	Flywheel, TX, USA
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 Analyst	Algolia, CA, USA

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
*AI 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 AI, 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

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

umsi.careers@umich.edu