Run this model daily in Trump’s absence

<https://www.discoverdatascience.org/online/masters-in-data-science/>

**University of Wisconsin-Eau Claire**– Eau Claire, Wisconsin  
[Master of Science in Data Science](https://www.uwec.edu/academics/majors-minors/data-science/)  
The University of Wisconsin – Eau Claire now offers a 12 course, 36-credit online master’s degree in data science. The program offers a rigorous multidisciplinary curriculum where students will study computer science, math and statistics, management, and communication. Students will learn to harness the power of large and complex data sets while leveraging the latest tools and analytical methods lead by expert University of Wisconsin faculty.  
**Program Length:** 36 credits  
**Delivery Method:** Online  
**GRE:**Not Required  
**2018-2019 Tuition:**$507 per credit (Resident) $1,027 per credit (Non-Resident)  
[Course Offerings](https://datasciencedegree.wisconsin.edu/data-science-program/data-science-masters/)

**University of Wisconsin-Green Bay**– Green Bay, Wisconsin  
[Online Master’s Degree In Data Science](https://www.uwgb.edu/data-science/)  
The University of Wisconsin – Green Bay has designed a Master’s Degree in Data Science for students with a future in big data. Students will clean, organize, analyze, and interpret unstructured data into big insights for better decisions. With a completely online degree, students can complete coursework at their own time, in a place convenient to them. Throughout the program, students participate in classes such as Statistical Methods, Programming of Data Science, Big Data High-Performance Computing, Ethics of Data Science, and a Capstone course where students form a question to be answered by data, then collect, clean and process data in order to apply suitable models and methods to the problem.  
**Program Length:** 36 credits  
**Delivery Method:** Online  
**GRE:**Not Required  
**2018-2019 Tuition:**$825 per credit

**University of Wisconsin**– Madison, Wisconsin 29,000 Rank 46  
[Online Master of Science in Data Science](https://datasciencedegree.wisconsin.edu/)  
To earn the online master’s in data science at the University of Wisconsin – Madison, students must complete 12 courses, comprising 36 credits. Courses include foundations of data science, data warehousing, high-performance computing, communicating about data, data mining, ethics of data science, prescriptive analytics, and a capstone course, among others. Applicants must have prior coursework in statistics, computer programming, and database administration, while ideally they will also have 3-5 years in a related field.  
**Program Length:** 36 credits  
**Delivery Method:** Online  
**GRE:**Not Required  
**2018-2019 Tuition:**$825 per credit

**University of Wisconsin**– Madison, Rank 46

Engineering (Engineering Data Analytics option), ME UW-Madison Engineering Data Analytics 1300 per credit

National **Universities**, 119

**DePaul University**– Chicago, Illinois  
[Master of Science: Data Science](https://www.cdm.depaul.edu/academics/Pages/MS-in-Data-Science.aspx)DePaul’s Master of Science program teaches the next generation of business leaders to analyze massive quantities of complex data and draw informed conclusions. The coursework emphasizes technical excellence and hands-on experience, giving students skills in data mining, statistics, machine learning, and big data processing. Graduates of this program earn an average salary of $90,000 with most students entering careers in healthcare, finance, and similar industries.  
**Program Length:** 52 quarter credits  
**Delivery Method:**Online or campus  
**GRE:** Not required  
**2018-2019 Tuition:** $850 per credit  
[Course Offerings](https://www.cdm.depaul.edu/academics/Pages/current/Requirements-MS-In-Data-Science-Computational-Methods.aspx)

**Drexel University**– Philadelphia, Pennsylvania National Universities, 102  
[Online Master’s Degree in Data Science](https://online.drexel.edu/online-degrees/information-sciences-degrees/ms-data-science/index.aspx)  
Drexel’s Online Master’s Data Science program is a precisely woven degree in both computer science and information systems. Not only do students learn to extract and summarize data into coherent reports, but students also learn to manipulate data, dig deeper into its core, and determine trends. Through this, students will become business leaders who can craft their findings into a communicable story for his or her organization. The data science program concludes with a capstone project to demonstrate a thorough understanding of one’s education.  
**Program Length:** 45 credits  
**Delivery Method:**Online  
**GRE:** Not Required  
**2018-2019 Tuition:** $18,522 per year (New Jersey resident), $31,011 per year (Non-resident)

**Johns Hopkins University**– Baltimore, Maryland 3.0 GPA with   
[Master of Science in Data Science](https://ep.jhu.edu/programs-and-courses/programs/data-science)  
To obtain the master’s in data science at Johns Hopkins, students must complete ten courses within five years. This includes eight required courses and two upper-level electives—one in applied and computational mathematics and the other in computer science. Students can complete these courses completely online, or in a hybrid of online and on-site. Applicants must complete prerequisites in multivariate calculus, discrete mathematics, and programming; these courses can be completed through Johns Hopkins.

**Program Length:** 30 credits  
**Delivery Method:** Online or Campus  
**GRE:**Not Required  
**2018-2019 Tuition:**$1,352 per credit  
[Course Offerings](https://ep.jhu.edu/programs-and-courses/programs/data-science#quickset-program_pages_content_3)

* your prior education must include the following prerequisites: (1) multivariate calculus; (2) discrete mathematics; (3) courses in Java or C++ (note that actual competency in Java is expected and that Python can be accepted on a case-by-case basis); and (4) a course in data structures. Linear Algebra or Differential Equations will be accepted in lieu of Discrete Mathematics. A grade of B− or better must have been earned in each of the prerequisite courses.

**North Central University**– San Diego, California  
[Data Science – MS-TIM](https://www.ncu.edu/programs-degrees/masters/master-science-data-science)North Central University boasts a data science program that prepares students to take in and process tons of data from a given organization. They will then be able to turn it into understandable and presentable information for members of the organization. While in class, students will utilize the latest statistical and modeling tools for helping organizations grow and serve stakeholders interests. Coursework includes 30 credit hours in 10 courses with a completion time of approximately 23 months. North Central University offers ultimate flexibility in classes, lectures, and assignments. Professors are 100% guaranteed mentored doctors in the student’s chosen field of study. Moreover, students receive one-on-one interaction with professors for specialized learning opportunities.

**Program Length:** 30 Credit hours  
**Delivery Method:**Online  
**GRE:** Not Required  
**2018-2019 Tuition:** $2,898 per course  
[Course Offerings](https://www.ncu.edu/programs-degrees/masters/master-science-data-science)

**Northwestern University**– Evanston, Illinois Estimated cost for entire program (total with technology fee): $54,742  
[Master’s in Data Science Online](https://sps.northwestern.edu/masters/data-science/)  
The Northwestern University online master’s in data science requires the completion of 12 courses to obtain a degree. There are six core courses, a leadership or project management course, two courses corresponding to a declared specialization, two electives, and a capstone or thesis. Data Science students gain critical skills including learning to utilize relational and document database systems. They will also learn to leverage analytics software built upon open-source systems such as R, Python, or TensorFlow. Many of the courses are designed to help students from a non-technical background to more technical studies.  
**Program Length:** 12 courses  
**Delivery Method:** Online  
**GRE:**Not Required  
**2018-2019 Tuition:**$4,309 per course  
[Course Offerings](https://sps.northwestern.edu/masters/data-science/program-courses.php)

**Syracuse University**– Syracuse, New York 60,000  
[M.S. in Applied Data Science](https://ischoolonline.syr.edu/graduate-programs/applied-data-science/)  
As of fall 2017, Syracuse University offers an online master’s in applied data science. The master’s consists of 6 common core courses, four analytics application core courses, and electives such as time series modeling, scripting for data analysis, natural language processing, data warehouse, and advanced database management. To earn the degree, students must complete a portfolio milestone. The Northwestern University online master’s in data science requires the completion of 12 courses to obtain a degree. There are six core courses, a leadership or project management course, two courses corresponding to a declared specialization, two electives, and a capstone or thesis.  
**Program Length:** 36 credits  
**Delivery Method:** Online  
**GRE:**GRE waiver for qualified students  
**2018-2019 Tuition:**$1,650 per credit

**Southern Methodist University**– Dallas, Texas  
[Online Master of Science in Data Science](https://datascience.smu.edu/)  
Southern Methodist University offers four start dates per year for students to begin their online studies toward a master’s in data science (January, May, September and November). Generally requiring 20-28 months to complete, students take 33.5 credits of coursework to earn the master’s degree. Courses focus on statistical analysis, technical skills, visualization and communication, and applied data science. Students may also elect to add a specialization to their degree in Machine Learning or Business Analytics. Bridge courses in statistics and computer programing with Python and R are available for students to prepare for the master’s degree.  
**Program Length:** 33.5 credits  
**Delivery Method:** Online  
**GRE:**GRE waiver for qualified students  
**2018-2019 Tuition:**$1,704 per credit

**University of Illinois at Urbana-Champaign**– Champaign, Illinois  
[Master of Computer Science in Data Science](https://online.illinois.edu/online-programs/graduate-programs/computer-science---data-science)  
The University of Illinois – Urbana-Champaign offers an online master’s of computer science in data science that requires eight courses, making up 32 credits. Students learn data visualization, machine learning, cloud computing, and data mining, and take advanced courses such as advanced Bayesian modeling, data curation, and a final capstone project. This coursework can be completed in as little as one year, and no longer than five years. Applicants are required to have a significant background in computer programming, data structures, and algorithms.  
**Program Length:** 32 credits  
**Delivery Method:** Online  
**GRE:**Not Required  
**2018-2019 Tuition:**$19,200 per program

**University of Maryland**– College Park, Maryland  
[Master of Professional Studies in Survey and Data Science (MPDS)](https://academiccatalog.umd.edu/graduate/programs/survey-data-science-online-mpds/)  
The UMD Master of Professional Studies in Survey and Data Science prepares students to be data-centric research professionals, ready to use new technologies and methodologies to improve the quality of social and statistical data. In the program, students receive technical training about how to collect, manipulate, and analyze data to answer a research question. With its unique focus on surveys, this data science program provides students with the skills and knowledge necessary to successfully lead projects and efforts that involve data from both surveys and non-traditional Big Data sources. The program shares its courses with international partners, bringing together UMD students and students from partner universities around the world using digital technologies. Student obtain a certificate by completing 19 credits of required courses and 11 credits of electives. The courses are fully online and generally only 1 or 2 credits each so that working professionals can fit them into their schedules. Students watch weekly prerecorded lectures, then meet online at a scheduled time each week to discuss the course material.  
**Program Length:** 30 credits  
**Delivery Method:** Online  
**GRE:** Not Required  
**2018-2019 Tuition:**$1,071 per credit

**University of Missouri**– Columbia, Missouri  
[Master of Science in Data Science and Analytics](https://dsa.missouri.edu/)  
The University of Missouri has designed an online Master of Science program with only one week on campus each year so that working students can grow in their industry with time to plan for on-campus interactions. Students focus on five concentration areas. Geospatial: for the next generation of location-driven focused data scientists. Biotechnology: teaches medical-based students data analytics skillsets to mine, process, and interpret large-scale genomics and medical records. High-Performance Computing: immerses students in big data computational ecosystems while embracing the data intelligence businesses require. Human-Centered Design for Data: Foundations and applied experience of methods and components of information and its impact on technical and social data analytics. Data Journalism/Strategic Communication: embrace the knowledge of data strategies and analytics in a changing and competitive world while obtaining the ability to assemble consumer data and design models to fulfill various data responsibilities.  
**Program Length:** 32 credits  
**Delivery Method:** Online  
**GRE:**Not Required  
**2018-2019 Tuition:**$17,000 per year  
[Course Offerings](https://dsa.missouri.edu/)

**University of North Texas**– Denton, Texas  
[MS in Data Science](https://informationscience.unt.edu/ms-data-science-degree-structure)  
University of North Texas’ MS in Data Science will give students the ability to embrace large digital repositories, act as data science and data analytics professionals, and transform a growing amount of data into usable information. This program is designed to meet the ever-changing market needs of highly-skilled data scientists. Students partake in 9 credit hours of required courses: Fundamentals of Data Analytics, Analytic Tools, Techniques and Methods, and Data Visualization and Communication. Then, after 15 credit hours of guided electives and nine credit hours of general electives, students spend three credit hours in an internship or research project: Seminar in Research and Research Methodology or Practicum and Internship in the Field of Study. Graduates will be fully prepared to handle organizations’ growing data issues and guide the growth of big data.  
**Program Length:** 36 credit hours  
**Delivery Method:**Online or Campus  
**GRE:** Not Required  
**Tuition:** $7,165 per year (Texas resident) $14,635 per year (Non-resident)

=====splunk

Setting> Searches, Reports, and Alerts , the app select ALL

go to App: Network Operations Center

search the one you want > clone it >

to open data source

Splunk read data SQL to create fraud\_registration\_activity, every 15 mins, but the alert is set to run every 1 hour

span=30m, how the time group them by

index=database sourcetype="fraud\_registration\_activity"

| timechart span=30m count by Status partial=false

| eval Declined = coalesce(Declined,0)

| eval Declined = Declined + 'Soft Decline'

| fields - "Soft Decline"

| eval "Approval Rate"=round((Accepted / (Accepted + Declined)) \* 100, 2)

| rename Accepted as Approved, Refer as Pending

If need verify the code, just put it in New Search

If you want to add filter to code, index=database sourcetype="fraud\_registration\_activity"(ProductKey = "7881")

If set up email alert, just Edit, alert, email to Justin, Lincy, anna,mike,bernie

If need runbook, then talk with Arian Orr or Erick Carias

Jun 25,2019 we change the score card, CIP pass rate goes up

Check JIRA NOC-509 to create runbook

What happen is, if alert trigger, NOC will look at the alert, it point to NOC-625, they will go JIRA to check detail

If you want to dedupe PARTITION BY rpiv.RegistrationProfileKey ORDER BY ivr.IdentityValidationResultKey DESC) AS dedup

Hugo: which mean, for 1 RegistrationProfileKey , might has multiple IdentityValidationResultKey

i only want to keep that latest one IdentityValidationResultKey

Tim: so for each RegistrationProfileKey, you'll get the latest IdentityValidationResultKey BECAUSE splunk use TIME to dedupe, will keep the latest one

| dedup <field name>

index=fraud sourcetype=blocked\_accounts ProductKey=7881

| timechart span=30m sum(P9) as P9, sum(B5) as B5, sum(Blocks) as Blocks

| stats sum(P9) as P9, sum(B5) as B5, sum(Blocks) as Blocks