

DAILY ASSESSMENT REPORT

Date:	15 July 2020	Name:	Gagan M K
Course:	Mathematics for Machine Learning: Linear Algebra	USN:	4AL17EC032
Topic:	<ul style="list-style-type: none"> Week 3 	Semester & Section:	6th sem & 'A' sec
GitHub Repository:	Alvas-education-foundation/Gagan-Git		

FORENOON SESSION DETAILS

Image of session

The screenshot displays a Coursera video player interface. At the top, the Coursera logo and a user profile icon for 'Gagan M K' are visible. The breadcrumb trail indicates the course path: 'Mathematics for Machine Learning: Linear Algebra > Week 3 > Matrices, vectors, and solving simultaneous equation problems'. The video title is 'Matrices, vectors, and solving simultaneous equation problems'. The video player shows a man in a light blue shirt speaking, with the text 'Matrices, Vectors and solving Simultaneous Equation Problems' and 'Introduction to Matrices' overlaid. The video progress bar shows 0:15 / 5:31. Below the video player, there are buttons for 'Save Note', 'Discuss', and 'Download'. A language dropdown menu is set to 'English', and a 'Help Us Translate' link is present. On the left sidebar, a list of topics is shown, with 'Video: Matrices, vectors, and solving simultaneous equation problems' selected. On the right sidebar, there is a 'Notes' section with an icon for capturing notes and a brief instruction on how to use the 'Save Note' button.

Report – Report can be typed or hand written for up to two pages.

Matrices, vectors, and solving simultaneous equation problems:

- Matrix is an arrangement of numbers into rows and columns. Make your first introduction with matrices and learn about their dimensions and elements. A matrix is a rectangular arrangement of numbers into rows and columns. For example, matrix A has two rows and three columns.
- The mathematical concept of a matrix refers to a set of numbers, variables or functions ordered in rows and columns. Such a set then can be defined as a distinct entity, the matrix, and it can be manipulated as a whole according to some basic mathematical rules.
- Matrices can be used to compactly write and work with multiple linear equations, referred to as a system of linear equations, simultaneously. Matrices and matrix multiplication reveal their essential features when related to linear transformations, also known as linear maps.
- A matrix is a collection of numbers arranged into a fixed number of rows and columns. Usually the numbers are real numbers. In general, matrices can contain complex numbers but we won't see those here.
- In geology, matrices are used for making seismic surveys. They are used for plotting graphs, statistics and also to do scientific studies and research in almost different fields. Matrices are also used in representing the real world data's like the population of people, infant mortality rate, etc.
- Main point of the Matrix: The Matrix trilogy suggests that everyone has the individual responsibility to make the choice between the real world and an artificial world. Though Neo is the exemplar of free will, fate plays a large role in his adventure. Neo relies on the Oracle, and everything she says comes true in some way.

Application of Matrices:

- Almost every branch of physics, including classical mechanics, optics, electromagnetism, quantum mechanics, and quantum electrodynamics, matrices are used to study physical phenomena, such as the motion of rigid bodies.
- Matrices have also come to have important applications in computer graphics, where they have been used to represent rotations and other transformations of images. is a 2×3 matrix. A matrix with n rows and n columns is called a square matrix of order n .
- Matrices are classified according to the number of rows and columns, and the specific elements therein. (i) Row Matrix: A matrix which has exactly one row is called a row matrix. The above two matrices are row matrices because each has only one row.
- Matrices are a useful way to represent, manipulate and study linear maps between finite dimensional vector spaces (if you have chosen basics). The Matrix (1999) and continuing with two sequels, The Matrix Reloaded and The Matrix Revolutions (both in 2003), all written and directed by the Wachowskis and produced by Joel Silver.
- The term matrix was introduced by the 19th-century English mathematician James Sylvester, but it was his friend the mathematician Arthur Cayley who developed the algebraic aspect of matrices in two papers in the 1850s.

- In biology, matrix is the material (or tissue) in animal or plant. Structure of connective tissues is an extracellular matrix. It is found in various connective tissues. It is generally used as a jelly-like structure instead of cytoplasm in connective tissue.
- This matrix just tells us where the basis vectors go. That's the transformation it does. It's not a complicated, multiplying-out thing. We don't need to worry about the mechanics of doing the sum. We can just think of it in terms of what it does to vectors in the space.

Gagan M K

Mathematics for Machine Learning: Linear Algebra > Week 3 > Solving linear equations using the inverse matrix

Prev | Next

Introduction to matrices

Matrices in linear algebra: operating on vectors

Matrix Inverses

Video: Solving the apples and bananas problem: Gaussian elimination
8 min

Video: Going from Gaussian elimination to finding the inverse matrix
8 min

Practice Quiz: Solving linear equations using the inverse matrix
8 questions

Special matrices and Coding up some matrix operations

PRACTICE QUIZ • 30 MIN

Solving linear equations using the inverse matrix

Submit your assignment

Receive grade
TO PASS: 80% or higher

Grade
100%
View Feedback
We keep your highest score

Gagan M K

Mathematics for Machine Learning: Linear Algebra > Week 3 > Identifying special matrices

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Vectors

Matrix Inverses

Video: Solving the apples and bananas problem: Gaussian elimination
8 min

Video: Going from Gaussian elimination to finding the inverse matrix
8 min

Practice Quiz: Solving linear equations using the inverse matrix
8 questions

Special matrices and Coding up some matrix operations

Video: Determinants and Inverses
10 min

Notebook: Identifying special matrices
1h

Video: Summary
59 sec

Programming Assignment: Identifying special matrices
30 min

Programming Assignment: Identifying special matrices

Passed • 10/10 points

It looks like this is your first programming assignment. [Learn more](#)

Deadline Pass this assignment by Aug 3, 12:29 PM IST

Instructions My submission Discussions

Open the notebook item in this module. Follow the instructions there and submit from inside the notebook. You can use this page once complete to check your score.

Good luck!

How to submit
 When you're ready to submit, you can upload files for each part of the assignment on the "My submission" tab.

Date:	15 July 2020	Name:	Gagan M K
Course:	Trailhead	USN:	4AL17EC032
Topic:	<ul style="list-style-type: none"> Land Your Next Opportunity 	Semester & Section:	6 th sem & 'A' sec

AFTERNOON SESSION DETAILS

Image of session:

The screenshot shows the Trailhead interface for the 'Land Your Next Opportunity' unit. At the top, there's a search bar and navigation links. The main content area includes the unit title, learning objectives, a 'Now You are Ready!' section with an illustration of a person on a staircase, and a list of topics. A sidebar on the right shows the time estimate, topics list, and a challenge button.

TRAILHEAD Home Learn ▾ Credentials ▾ Community ▾ For Companies ▾ COVID-19 ▾

Career Development Planning > Land Your Next Opportunity ▾

Land Your Next Opportunity

Learning Objectives

After completing this unit, you'll be able to:

- Prepare for interviewing by creating your elevator pitch.
- Create your Salesforce resume and profile.
- Connect with employers.

Now You are Ready!

Now that you know where you're headed and you've created your plan to get there, it's time to go out and land that next role. We've created a job seeker checklist, included in the Resources pack you downloaded, to help you make sure your personal presence is amazing both in person and online.

Time Estimate
⌚ About 15 mins

Topics

- Learning Objectives
- Now You are Ready!
- Update Your Resume
- Create Your Elevator Pitch
- Polish Your Personal Brand
- Research Prospective Companies
- Search for Salesforce Opportunities
- Connect with a Recruiter
- Apply for a Job
- Resources

Challenge +100 points

? Question, feedback or help

Report – Report can be typed or hand written for up to two pages.

- **Prepare for interviewing by creating your elevator pitch.**
- **Create your Salesforce resume and profile.**
- **Connect with employers.**
- **Now that you know where you're headed and you've created your plan to get there, it's time to go out and land that next role. We've created a job seeker checklist, included in the Resources pack you downloaded, to help you make sure your personal presence is amazing both in person and online.**
- **If you haven't updated your resume in a while, it's time to dust it off and add in your most recent work experience, and any new skills and certifications you've earned.**
- **If you're making a major career change or changing industries, consider hiring a professional to help you position your previous experience that is relevant for the new role.**
- **Make sure you proofread your resume carefully. Have a friend or family member read it over if you can. You don't want to miss out on an opportunity because you missed a typo.**
- **An elevator pitch is the 30-second story of who you are and where you want to go, and it usually ends with a specific ask or request. It's your personal "commercial." Hone and practice it until you can deliver it smoothly.**
- **Your elevator pitch is the perfect response to questions like, "Tell me about yourself" or "What do you do?" It can prepare you for that chance encounter with the company CEO in the elevator (or in the line at the coffee shop, or anywhere!).**
- **Your social media presence is the new resume. Employers and recruiters look to social media to learn more about candidates, so it's important to make sure your profiles are top notch and that your personal brand is epic, amazing, and every bit as professionally compelling as you are in real life.**
- **Complete your profile on Trailhead. Make sure you have a professional photo and use your newly perfected elevator pitch for your bio.**
- **The Salesforce community is on Twitter, so that's a great place look for news and information as well as establish yourself as a thought leader.**
- **Ready to start your search? In addition to the general job sites such as dice.com, monster.com, and others, there are many specific job boards for Salesforce roles. Here are a few of the job boards.**
- **AppExchange Jobs Marketplace: Search for jobs by location or title, or post your profile for employers to find.**
- **Jobs at Salesforce: Work at the company voted "most innovative company in the world" for the past 5 years by Forbes magazine.**
- **Trailblazer Community: There are various groups dedicated to job search and job postings such as the Jobs Postings group.**
- **CRM Market: A community marketplace for people and entities to list projects, discover talent, and implement Salesforce solutions.**