



IEEE - MVSR STUDENT BRANCH
Student Branch Code: 12161, School Code: 41329276



THREE DAY WORKSHOP ON LINEAR ALGEBRA FOR DATA SCIENCE

A three-day workshop on Linear Algebra for Data Science was organized by IEEE MVSR in collaboration with Department of Information Technology on 8th, 9th and 11th April 2022. The main agenda of this workshop was to help beginners start their learning journey in data science by developing a familiarity with essential concepts in Linear Algebra.

Student Branch Mentor:

Dr. Atul Negi,
Professor,
School of CIS,
University of Hyderabad

Student Branch Advisor:

Dr. G. Kanaka Durga
Principal and Professor,
MVSR Engineering College.

Student Branch Counsellor:

Dr. D. Hari Krishna,
Associate Professor, EEE Dept.,
MVSR Engineering College.

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Women in Power	Ms. B. Rajya Laxmi

WIE Student Branch Advisor:

Mrs. A. Vijaya Vahini
Assistant Professor, IT Dept.,
MVSR Engineering College.

PES Advisor:

Dr. D. Hari Krishna,
Associate Professor, EEE Dept.,
MVSR Engineering College.

CS student branch advisor:

Mrs. B. Saritha
Associate Professor, CSE Dept.,
MVSR Engineering College.

CASS Student Branch Advisor:

Mrs. S. Aruna
Assistant Professor, ECE Dept.,
MVSR Engineering College.

Computer Society:

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Session Details:

Date: 8th April, 2022

Timings: 6:00 PM to 8:00 PM

Number of Attendees: 26

Speakers for the session:

Day 1 - Mr DBV Ravi Sankar, Assistant Professor, Department of IT, MVSR Engineering College.

Day 2- Mr R Karthik, Lead AI Engineer, Data Scientist at Accenture.

Day 3 - Mr Moiz Ehteshamuddin, Assistant Professor of Mathematics, MVSR Engineering College.

Maturi Venkata Subba Rao (MVSRR) Engineering College
(An Autonomous Institution)
(Sponsored by Matrusri Education Society, Estd. 1980)
Affiliated to Osmania University & Approved by AICTE

IEEE MVSRR Student Branch

Department of Information Technology in collaboration with IEEE MVSRR SB

Three day workshop on linear algebra for Data Science

Speakers:

Mr. D B V Ravi Shankar, Associate Professor, Department Of Information Technology, MVSREC	Mr. Moiz Ehteshamuddin, Assistant Professor, Department of Applied Sciences and Humanities, MVSREC	Mr. R. Karthik Lead AI Engineer / Data science Associate Manager at Accenture
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8th, 9th and 11th April
6:00-8:00 PM

Register here:
<https://forms.gle/AqAQPjAtfxHaYHJy6>

Faculty coordinators:
Dr. A. V. Krishna Prasad: 9912111742 **Dr. D. Hari Krishna: 9490215195**

Flyer for Workshop

DAY 1: INTRODUCTION TO LINEAR ALGEBRA

The workshop was commenced by Mr. Ch. Sai Teja, IEEE MVSRR Student Branch chairperson by welcoming Dr D Hari Krishna, IEEE MVSRR Student Branch Counsellor, Dr H Jayasree, Head of IT Department, Dr A V Krishna Prasad, Associate Professor IT, Speaker of the Session Mr DBV Ravi Sankar and all the participants. He then invited Dr D Hari Krishna to address the session.

Dr D Hari Krishna mentioned that it is privilege to collaborate with Department of Information Technology to organize this three-day workshop on Linear algebra. He explained about the increase in demand of data and the importance of Linear Algebra to start the journey of learning Data Science. He then asked the participants to be active learners throughout the session.

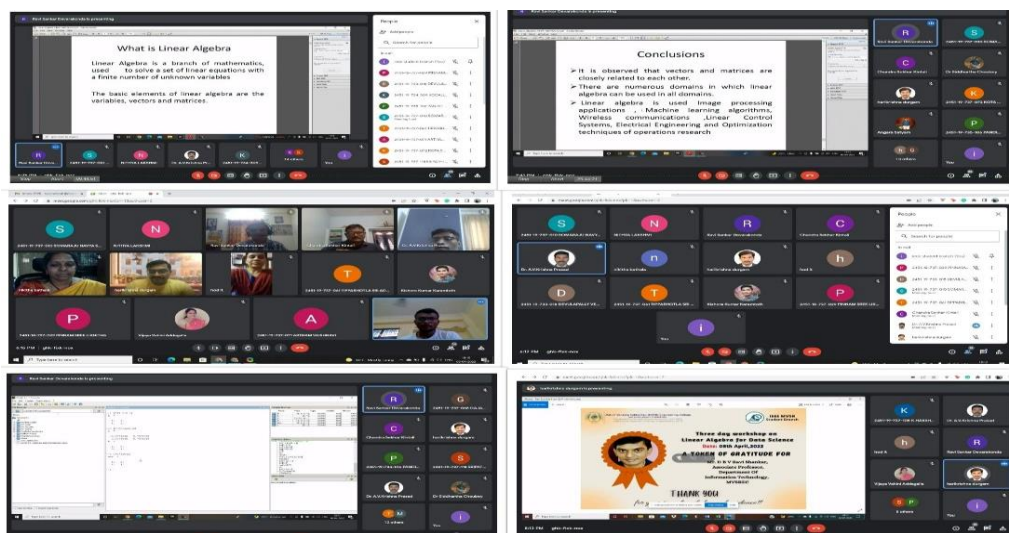
Later Dr H Jayasree addressed the session. She thanked Dr D Hari Krishna for collaborating with Department of IT for the workshop. She mentioned that these sessions will be helpful and will guide students into the path of data science. She asked the participants to take most out of the sessions and be serious throughout the workshop.

Followed by this Dr A V Krishna Prasad welcomed the participants and thanked the speakers of the sessions Mr D B V Ravi Shankar, Assistant Professor, Department of IT, MVSR Engineering College, Mr R Karthik, Lead AI Engineer and Data Science Associate Manager at Accenture, Mr Moiz Ehteshamuddin. Assistant Professor of Mathematics, MVSR Engineering College. He then thanked Dr D Hari Krishna for collaborating with Department of IT to organize this workshop.

Then S Navya Sree, Joint Secretary, IEEE MVSR Student Branch introduced the speaker of the session Mr D B V Ravi Shankar, Assistant professor, Department of IT, MVSR Engineering College, and asked him to take over the session.

Mr DBV Ravi Sankar thanked Dr D Hari Krishna, Dr A V Krishna Prasad for the opportunity. He then presented the topics to be covered in the session. He started by briefing out what actually is Linear Algebra. He then talked about System of linear Equations and properties of vectors. Followed by this, he explained the representation, types and properties of matrices and recalled the basics for further problems. He then presented the analogy between vectors and matrices. Later he explained the methods to find determinant, eigen values, eigen vectors and rank of a matrix. He then talked about various simulation tools for Linear Algebra and has given a brief demo of Skylab.

Dr D Hari Krishna thanked Dr D B V Ravi Shankar for his terrific lecture and presented him a virtual memento. Vote of thanks by K Harshitha, Student Coordinator, Department of IT, MVSR, commenced the end of the session.



Snap shots from Day 1 of workshop

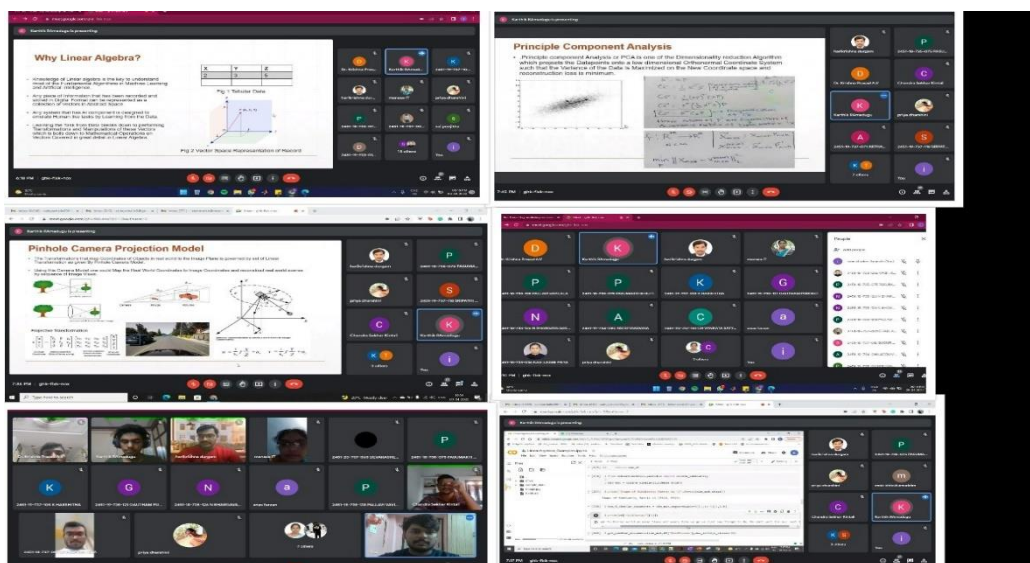
DAY 2: APPLICATIONS OF LINEAR ALGEBRA FOR DATA SCIENCE

The day 2 of workshop was commenced by Mr. K Uthej, IEEE MVSR Student Branch Vice Chairperson by welcoming Dr D Hari Krishna, IEEE MVSR Student Branch Counsellor, IEEE MVSR PES Student Chapter Advisor, Dr H Jayasree, Head of IT Department, Dr A V Krishna Prasad, Assistant Professor IT, speaker of the session Mr R Karthik and all the participants. He then invited Dr D Hari Krishna to address the session.

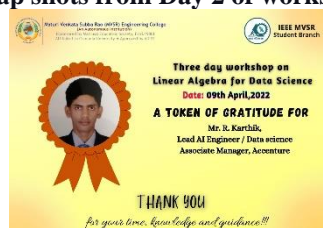
Dr D Hari Krishna greeted the participants and speaker of the session Mr R Karthik, Lead AI Engineer and Data Science Associate Manager at Accenture. He mentioned that participants should pay keen attention to the sessions and be active learners. Then K Harshitha, Student Coordinator, Department of IT, MVSR Engineering College, introduced the speaker of the session Mr R Karthik and asked him to take over the session.

Mr Karthik thanked Dr D Hari Krishna for the opportunity. He then presented the topics to be covered in the session. He started with why linear algebra is algebra and briefed out the basics of data and how is AI, ML related to Data Science. He then talked about representing data as vectors and system of linear equations. Then with practical implementation he stated the principle of component analysis. He then mentioned about vector model and gave examples of topic modelling. He then presented and explained about applications of linear Algebra in Computer Vision and gave introduction to fine and perspective transformation.

Dr D Hari Krishna thanked Mr R Karthik for delivering a wonderful session and presented him a virtual memento. Vote of thanks by K Harshitha commenced the end of the session.



Snap shots from Day 2 of workshop

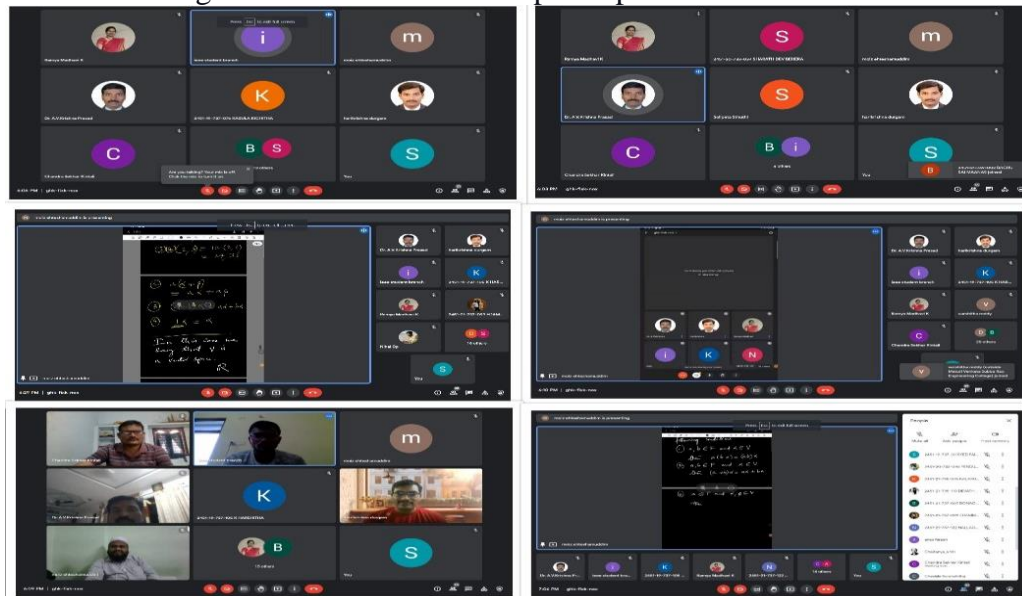


Virtual Memento for Day 2 speaker Mr. R. Karthik

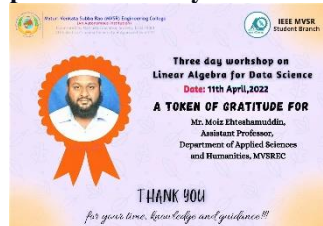
DAY 3: MATHEMATICAL STRUCTURE OF LINEAR ALGEBRA

The day 3 of workshop was commenced by Mr. Ch Sai Teja, IEEE MVSR Student Branch Chairperson by welcoming Dr D Hari Krishna, IEEE MVSR Student Branch Counsellor, IEEE MVSR PES Student Chapter Advisor, Dr. H Jayasree, Head of IT Department, Dr A V Krishna Prasad, Assistant Professor IT, speaker of the session Mr R Karthik and all the participants. He then invited Dr D Hari Krishna to address the session.

Dr D Hari Krishna greeted the participants and speaker of the session Mr Moiz Ehteshamuddin, Assistant professor of Mathematics, MVSR. He mentioned that participants were learning great from previous sessions and asked them to continue the same and wished happy learning to all the participants. Then K Harshitha, Student Coordinator, Department of IT, MVSR Engineering College, introduced the speaker of the session Moiz Ehteshamuddin and asked him to take over the session. Mr Moiz Ehteshamuddin thanked Dr D Hari Krishna and Dr A V Krishna Prasad for the opportunity. He then presented the topics to be covered in the session. He gave an introduction about Linear Algebra and vector space. He then talked about properties of vectors. He then took various examples to explain the mathematical structure of Linear Algebra. Later the doubts of participants were clarified.



Snap shots from Day 3 of workshop



Virtual Memento for Day 3 speaker Mr. Moiz Ehteshamuddin

Dr D Hari Krishna thanked Mr Moiz Ehteshamuddin for delivering an enthralling session and presented him a virtual memento. Vote of thanks by Ms. Ramya Madhavi, Assistant Professor, Department of IT, MVSREC commenced the end of the workshop.

REPORTED BY:
IEEE MVSR SB