

A Seminar on DeepSeek AI

Dr. K P Adhiya

Computer Engg.

Activity Report

Academic Year	2024-25
Program Driven by	
Quarter	III
Program / Activity Name	Capacity Building Program
Program Type	
Program Theme	Innovation and startups
Start Date	15-03-2025
End Date	15-03-2025
Duration of the Activity (in Mins)	60
Number of Student Participant	0
Number of Faculty Participant	70
Number of external Participant	--
Expenditure Amount in Rs.	
Any Remark	--
Mode of Session Delivery	Offline
Objective	
Benefit in terms of Learning / Skills / Knowledge obtained	
Feedback	
Video url (mp4)	
Photograph 1 (jpg)	Attached
Photograph 2 (jpg)	Attached
Overall report of the Activity (pdf)	As given below



Dr. P. H. Zope
Convener IIC



Presented by: Dr. K P Adhiya

Department: Computer Engineering

Institution: [SSBT COET Bambhori Jalgaon]

Date: [15-03-25]

1. Introduction

DeepSeek AI is a Chinese artificial intelligence company that has rapidly gained global recognition for its innovative and cost-effective AI models. Founded in July 2023 by Liang Wenfeng, the CEO of High-Flyer, a quantitative hedge fund based in Hangzhou, China, DeepSeek emerged from an AI research unit under High-Flyer AI established in 2019. The company has since developed high-performance AI models, such as DeepSeek-V3 and DeepSeek-R1, which have surpassed ChatGPT in app downloads and challenged the dominance of U.S.-based AI giants like OpenAI, Meta, and Google. [Dhyeya IAS+1Wikipedia+1](#)

2. DeepSeek AI Models

2.1 DeepSeek-V3

DeepSeek-V3 is a Mixture-of-Experts (MoE) language model with 671 billion total parameters, activating 37 billion parameters per token. It incorporates Multi-head Latent Attention (MLA) and DeepSeekMoE architectures, which were validated in DeepSeek-V2. The model was pre-trained on 14.8 trillion diverse and high-quality tokens, followed by Supervised Fine-Tuning and Reinforcement Learning stages. Comprehensive evaluations revealed that DeepSeek-V3 outperforms other open-source models and achieves performance comparable to leading closed-source models. Despite its excellent performance, DeepSeek-V3 required only 2.788 million H800 GPU hours for its full training. [Dhyeya IAS+2arXiv+2Wikipedia+2](#)

2.2 DeepSeek-R1

DeepSeek-R1 is an affordable yet powerful model designed to compete in areas like mathematics, coding, and general knowledge. It challenges the need for expensive AI systems by offering high performance at a fraction of the cost. DeepSeek-R1 utilizes NVIDIA H800 GPUs and optimized training techniques, such as Auxiliary-Loss-Free Load

Balancing, to reduce hardware expenses and maintain efficiency without sacrificing quality.
[Wikipedia+2Dhyeya IAS+2arXiv+2](#)

3. Cost-Effective AI Development

DeepSeek has achieved significant cost reductions in AI development through innovative strategies: [Dhyeya IAS+1Wikipedia+1](#)

- **Use of Older GPUs:** Instead of relying on expensive cutting-edge chips, DeepSeek utilizes NVIDIA H800 GPUs, lowering hardware expenses. [arXiv+2Dhyeya IAS+2Wikipedia+2](#)
- **Optimized Training Techniques:** The company's Auxiliary-Loss-Free Load Balancing method allows AI models to be trained with minimal resources, maintaining efficiency without sacrificing quality. [Dhyeya IAS+1arXiv+1](#)

These strategies have enabled DeepSeek to develop high-performance AI models at a fraction of the cost compared to traditional AI companies. [Dhyeya IAS](#)

4. Broader Implications


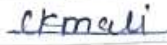

















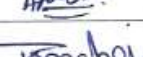
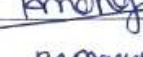
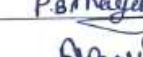

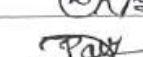

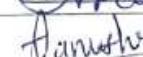
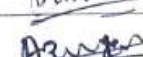
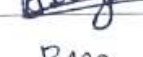


DeepSeek's success could reshape the AI industry by proving that high-performance AI can be built affordably. Its open-source approach is democratizing AI, making it accessible to smaller businesses, researchers, and developers who lack the financial backing of major corporations. This shift challenges the traditional belief that AI advancements require massive investments and opens new opportunities for innovation in the field. [Dhyeya IAS](#)

5. Conclusion

DeepSeek AI's innovative approach to AI development has disrupted the traditional AI industry by demonstrating that high-performance models can be built cost-effectively. Through its advanced models like DeepSeek-V3 and DeepSeek-R1, the company has set new benchmarks in AI performance and accessibility. As the AI landscape continues to evolve, DeepSeek's contributions highlight the potential for more inclusive and sustainable AI advancements. [arXiv+2](#)





Roll no.	Name	Sign
54	Kalyani Bapu pati	
17	Chaitali K. Mali	
60	Megha Manoj Patil	
45	Devayani Samadhan Patil	
74	Shruti Kiran Patil	
73	Shrushti Rakesh Patil	
80	Teena Hemraj Patil	
28	Nizgala Natendra Narkhede	
33	Vishakha Pramod Nikam	
46	Devyani Pravin Patil	
38	Ankita Sanjay Patil	
41	Rutuja Ravindra Patil	
32	Lavanya Santosh Nikam	
83	Pranjal Mukunda Patil	
02	Bhagyashree Anant Khewalkar	
79	Tanvi Vinesh Singh Patil	
70	Ranjana Dnyaneshwar Patil	
19	Prapti Shrawan Mali	
53	Jayshree G. Patil	
08	Bhumiika Dilip Mahajan	
10	Khushi Rajendra Mahajan	
06	Priyanka Bhagwan Magare	
39	Ankita Vilas Patil	
37	Keerti Kaduba Pordeshi	
36	Trupti Dyaneshwar Palve	
55	Khushi Vinayak Patil	
78	Tanushree Pandharinath Patil	
07	Aniket Balwant Mahajan	
05	Prajwal Vinod Machankar	
59	Mayur Sursh Patil	

Sr.No	Name of Student	Sign.	Roll No.
1)	Utkarsha S. Patil	<u>Utkarsha</u>	2
2)	Tanvi Vinod kulkarni	<u>Kulkarni</u>	62
3)	Utkarsha S. Suryawanshi	<u>US</u>	38
4)	Gayatri Tushar Shingate	<u>Gayatri</u>	26
5)	Simran Shawaka Tadari	<u>Tadari</u>	41
6)	Mansi suresh shirade	<u>Shirade</u>	27
7)	Snigdha Ratilal Patil	<u>Patil</u>	71
8)	Sejal Dipak Sandhanishiv	<u>Sandhanishiv</u>	21
9)	Pradnya Vijay Nikam	<u>Pradnya</u>	67
10)	Saniya Javed Shaikh	<u>Saniya</u>	74
11)	Gauri Vijay Sonar	<u>Gauri</u>	75
12)	Chhayashree Pralhal Patil	<u>Patil</u>	69
13)	Vaibhavi Vinayak patil	<u>Vaibhavi</u>	3
14)	Troiveni Ashok Solanki	<u>Troiveni</u>	29
15)	Abhijeet Girish Patil	<u>Patil</u>	68
16)	Shreyas Vijay Sangore	<u>Shreyas</u>	72
17)	Varad Anil Akurkar	<u>Varad</u>	55
18)	Aryan Kamal Bajaj	<u>Aryan</u>	53
19)	Reham Akiloddin Shaikh	<u>Reham</u>	73
20)	Ganesh P. Sushir	<u>G.P. Sushir</u>	40
21)	Yogeshwar Sapan Wagh	<u>Yogeshwar</u>	51
22)	OM Rajendra Talele	<u>Talele</u>	43
23)	chandheersant Devidas Ahire	<u>Ahire</u>	54
24)	Faigan Lukman Tadvi	<u>Tadvi</u>	79
25)	Kalpesh Ananda Sonawane	<u>Kalpesh</u>	31
26)	Chiranjy Digambar Rajput	<u>Chiranjy</u>	16

Roll No	Name	Sign
23	Aditya Arun more	<u>Aditya</u>
65	Pratik Rajesh Patil	<u>Pratik</u>
66	Prathmesh Avinash Patil	<u>Prathesh</u>
26	Kunal Vasant Nannaware	<u>Kunal</u>
03	Amol Govinda Kumbhar	<u>Amol</u>
04	Ramchandra Bhatu Lohar	<u>Ramchandra</u>
50	Harshal Bharat Patil	<u>Harshal</u>
12	Pranav Bhaskar Mahajan	<u>Pranav</u>
13	Sumit Vinod Mahajan	<u>Sumit</u>

Attendance Sheet

Date and Sign		15/03/25	29/03/25	
SN	Name of faculty Member	Dept.		
1	Dr. P.A. Shirule	Civil		02
2	Dr. F.I. Chavan	Civil		04
3	Dr. Sonali B. Patil	Civil		03
4	Mr. J.N. Kale	Civil		03
5	Ms. Jyoti R. Mali	Civil		05
6	Pankaj Ramdas Punase	Civil		03
7	Ms. Dipika Purushottam Mali	Civil		01
8	Kalyani Ganesh Bendale	Civil		00
9	Dr. K.P. Adhiya	Computer		04
10	Dr. Manoj E Patil	Computer		04
11	Mr. Ashish T. Bhole	Computer		04
12	Dr. Akash D. Waghmare	Computer		06
13	Dr. Dnyaneshwar K. Kirange	Computer		06
14	Dr. Pankaj H. Zope	Computer		03
15	Dr. Surendra P. Ramteke	Computer		06
16	Ms. Shital A. Patil	Computer		03
17	Mr. Sarkarsinha Harshinha Rajput	Computer		05
18	Mr. Mohan Pramod Patil	Computer		05
19	Mr. Ramkrishna Hari Patil	Computer		05
20	Mr. Pramodgiri B. Gosavi	Computer		02
21	Ms. Priyanka Vinod Medhe	Computer		06
22	Mr. Krunal Chadrashekhwar Pawar	Computer		03
23	Ms. Pooja Mukundrao Khandar	Computer		03
24	Ms. Ashwini Arun Kakde	Computer		03
25	Ms. Mayuri Rajesh Chandratre	Computer		04
26	Ms. Shama S Pawar	Computer		03
27	Mr. Mohammed Shafique Shaikh	Computer		05
28	Ms. Tejashri Anil Patil	Computer		—
29	Ms. Prachi Pushkaraj Chaudhari	Computer		—
30	Ms. Utkarsha Prmod Narkhede	Computer		—
31	Ms. Soniya Premraj Chaudhari	Computer		—
32	Ms. Dipali Daulatrao Phadat	Computer		—
33	Mr. V. S. Pawar	Electrical		03
Pranesh S. Sarda		02/12		02

Attendance Sheet

SN	Date and Sign	Name of faculty Member	Dept.	15/03/25	29/03/25	
34		Mr. M. Mujtahid Ansari	Electrical			05
35		Dr. Suhas M. Shembekar	Electrical		—	04
36		Dr. Rajesh R. Karhe	Electrical			04
37		Mr. Muqem Khan	Electrical	—		04
38		Mr. Tanveer Khatik	Electrical		—	04
39		Mr. Vijay Abaji Shinde	Electrical			02
40		Dr. M.P. Deshmukh	E&TC	—		04
41		Dr. V.M. Deshmukh	E&TC			04
42		Dr. N.M. Kazi	E&TC			04
43		Dr. Atul H. Karode	E&TC		—	04
44		Mr. Sunil K. Khode	E&TC		—	03
45		Ms. Rajashri B. Patil	E&TC			05
46		Dr. P.G. Damle	Mechanical		—	04
47		Mr. N. K. Patil	Mechanical	—		04
48		Dr. K. Shrivastav	Mechanical		—	02
49		Dr. Devendra B. Sadaphale	Mechanical			04
50		Dr. P. M. Solanki	Mechanical		—	04
51		Dr. Ajay R. Bhardwaj	Mechanical			03
52		Dr. Dipak C. Talele	Mechanical			05
53		Dr. Vijay R. Diware	Chemical	—		04
54		Dr. S. A. Thakur	Chemical	—	—	03
55		Mr. V. P. Sangore	Chemical	—		04
56		Mrs. Sarika S. Pawar	Chemical		—	03
57		Mrs. Ruchita S. Naik	Chemical		—	04
58		Dr. Sandip S. Patil	First Year			05
59		Dr. K. S. Patil	First Year	—	—	02
60		Dr. Sunita S. Patil	First Year	—		04
61		Dr. Prashant N. Ulhe	First Year			05
62		Mr. Amol Chandrakan Wani	First Year	—	—	03
63		Ms. Priti Ramesh Sharma	First Year		—	02
64		C.U. Nikam	First Year		—	01

Attendance Sheet

Date and Sign		Dept		Signs 29/01/21	
Sl. No.	Name of Faculty Member	Dept			
61	Mr. Pratik D. Patel	First Year	P	P	04
62	Mr. Dhanendra J. Doshi	First Year			04
63	Mr. Mahendra S. Patel	First Year			01
64	Mr. Manoj Prasad Kulkarni	First Year			04
65	Mr. Dharmendra Chandrakant Vagade	First Year			03
66	Dr. Anand T. Patel	First Year			03
67	Mrs. Nitesh Sawant	First Year			01
68	Mr. Tarun S. Chaudhari	First Year			07
69	Mrs. Anand Dhanraj Patel	First Year			00
70	Mr. Dhanendra S. Vagade	First Year			03
71	Mrs. Poo Manoj Mali	First Year			14
72	Mr. Dhanendra S. Chaudhari	First Year			12
73	Mr. Sachin Tejendra Bhalekar	First Year			13
74	Dr. Mahesh S. Rawlani	MBA			03
75	Dr. Rishi A. Modhyan	MBA			04
76	Mr. Farooq A. Khan	MBA			04
77	Mrs. Bharti F. Joshi	MBA			05
78	Mrs. Sakshi Manoj Kumar	MBA			04
79	Mr. Rishabh Sunil Patel	MBA			12
80	Mr. Anand Dhanraj Sawant	MBA			12
81	Dr. Pooja Dhanraj Vagade	MBA			
82	Mr. Tejendra Dhanraj Vagade	MBA			
83	Mr. Anand Dhanraj	MBA			
84	Mr. Dhanendra Dhanraj	MBA			
85	Mr. Dhanendra Dhanraj	MBA			
86	Mr. Dhanendra Dhanraj	MBA			
87	Mr. Dhanendra Dhanraj	MBA			
88	Mr. Dhanendra Dhanraj	MBA			
89	Mr. Dhanendra Dhanraj	MBA			
90	Mr. Dhanendra Dhanraj	MBA			
91	Mr. Dhanendra Dhanraj	MBA			
92	Mr. Dhanendra Dhanraj	MBA			
93	Mr. Dhanendra Dhanraj	MBA			
94	Mr. Dhanendra Dhanraj	MBA			
95	Mr. Dhanendra Dhanraj	MBA			
96	Mr. Dhanendra Dhanraj	MBA			
97	Mr. Dhanendra Dhanraj	MBA			
98	Mr. Dhanendra Dhanraj	MBA			
99	Mr. Dhanendra Dhanraj	MBA			
100	Mr. Dhanendra Dhanraj	MBA			

Attendance Sheet

SN	Name of faculty Member	Dept.	08/02/25	15/2/25	08/03/25	
1	Dr. P.A. Shirule	Civil				2
2	Dr. F.I. Chavan	Civil				2
3	Dr. Sonali B. Patil	Civil				1
4	Mr. J.N. Kale	Civil				1
5	Ms. Jyoti R. Mali	Civil				3
6	Pankaj Ramdas Punase	Civil				2
7	Ms. Dipika Purushottam Mali	Civil				0
8	Kalyani Ganesh Bendale	Civil				0
9	Dr. K.P. Adhiya	Computer				2
10	Dr. Manoj E. Patil	Computer				2
11	Mr. Ashish T. Bhole	Computer				3
12	Dr. Akash D. Waghmare	Computer				3
13	Dr. Dnyaneshwar K. Kirange	Computer				2
14	Dr. Pankaj H. Zope	Computer				2
15	Dr. Surendra P. Ramteke	Computer				3
16	Ms. Shital A. Patil	Computer				1
17	Mr. Sarkarsinha Harshinha Rajput	Computer				2
18	Mr. Mohan Pramod Patil	Computer				0
19	Mr. Ramkrishna Hari Patil	Computer				3
20	Mr. Pramodgiri B. Gosavi	Computer				
21	Ms. Priyanka Vinod Medhe	Computer				2
22	Mr. Krunal Chadrashankar Pawar	Computer				2
23	Ms. Pooja Mukundrao Khandar	Computer				2
24	Ms. Ashwini Arun Kakde	Computer				2
25	Ms. Mayuri Rajesh Chandratre	Computer				2
26	Ms. Shama S. Pawar	Computer				2
27	Mr. Mohammed Shafique Shaikh	Computer				2
28	Ms. Tejashri Anil Patil	Computer				
29	Ms. Prachi Pushkaraj Chaudhari	Computer				
30	Ms. Utkarsha Prmod Narkhede	Computer				
31	Ms. Soniya Premraj Chaudhari	Computer				
32	Ms. Dipali Daulatrao Phadat	Computer				
33	Mr. V. S. Pawar	Electrical				2

Attendance Sheet

SN	Name of faculty Member	Dept.	08/02/25	15/02/25	08/03/25	
34	Mr. M. Mujtahid Ansari	Electrical				3
35	Dr. Suhas M. Shembekar	Electrical				3
36	Dr. Rajesh R Karhe	Electrical				3
37	Mr. Muqem Khan	Electrical				3
38	Mr. Tanveer Khatik	Electrical				3
39	Mr. Vijay Abaji Shinde	Electrical				3
40	Dr. M.P. Deshmukh	E&TC				3
41	Dr. V.M. Deshmukh	E&TC				2
42	Dr. N.M. Kazi	E&TC				2
43	Dr. Atul H. Karode	E&TC				3
44	Mr. Sunil K. Khode	E&TC				3
45	Ms. Rajashri B Patil	E&TC				3
46	Dr. P.G. Damle	Mechanical				3
47	Mr. N. K. Patil	Mechanical				3
48	Dr. K. Shrivastav	Mechanical				1
49	Dr. Devendra B. Sadaphale	Mechanical				2
50	Dr. P. M. Solanki	Mechanical				3
51	Dr. Ajay R. Bhardwaj	Mechanical				3
52	Dr. Dipak C. Talele	Mechanical				3
53	Dr. Vijay R. Diware	Chemical				3
54	Dr. S. A. Thakur	Chemical				3
55	Mr. V. P. Sangore	Chemical				3
56	Mrs. Sarika S. Pawar	Chemical				3
57	Mrs. Ruchita S. Naik	Chemical				3
58	Dr. Sandip S. Patil	First Year				1
59	Dr. K. S. Patil	First Year				3
60	Dr. Sunita S. Patil	First Year				3
61	Dr. Prashant N. Ulhe	First Year				3
62	Dr. Amol Chandrakan Wani	First Year				3
63	Ms. Priti Ramesh Sharma	First Year				3
64	C.U. Nikam	First Year				3

Attendance Sheet

SN	Date and Sign	Dept.	08/02/25	15/2/2025	08/03/25	
65	Mr. Pravin D. Patil	First Year	P	P	—	2
66	Ms. Deepmala I. Desai	First Year	Desai	Desai	Desai	6
67	Mr. Mahendra B. Patil	First Year	—	—	—	0
68	Ms. Meera Prassan Kulkarni	First Year	Yashwanth	—	Yashwanth	6
69	Ms. Dhanashree Shashikant Tayade	First Year	D.	—	D.	2
70	Ujawalsing T. Patil	First Year	Patil	Patil	—	2
71	Mrs. Nancy Sawhney	First Year	—	—	—	1
72	Ms. Tanuja Y. Chouhan	First Year	—	—	Tanuja	1
73	Mrs. Anjali Darshan Patil	First Year	—	—	—	0
74	Ms. Jayashree R. Tayade	First Year	R. Tayade	R. Tayade	R. Tayade	3
75	Mrs. Puja Mayur Malu	First Year	—	Malu	Malu	2
76	Mr. Dashrath U. Chaudhari	First Year	DCM	—	DCM	2
77	Mr. Sachin Topalu Bhalerao	First Year	Sachin	Sachin	Sachin	6
78	Dr. Mahesh V. Rawlani	MBA	—	—	—	1
79	Dr. Richa A. Modiyani	MBA	R.	—	R.	2
80	Ms. Farooz A. Kazi	MBA	F.	—	F.	2
81	Mrs. Bharti P. Joshi	MBA	B.P.	B.P.	B.P.	3
82	Mrs. Sakina Mujahid Husain	MBA	Sakina	Sakina	Sakina	3
83	Mr. Rohan Suresh Patil	MBA	—	R. Patil	R. Patil	2
84	Ms. Vrushi Dinkar Sonawane	MBA	V.S.	V.S.	—	2
85	Dr. Puri Dinesh Dagadu	MCA	P.D.	P.D.	P.D.	2
86	Ms. Sapana Ananrao Fegade	MCA	Sapana	Sapana	—	2
87	Mr. Aslan Shaikh	MCA	Aslan	Aslan	—	2
88	Ms. Dhanshee Rajendra Shinde	MCA	—	—	—	0
89	Ms. Chetana Mohan Kawale	MCA	Chetana	Chetana	Chetana	2
90	Ms. Vishakha Yadonao Pande	MCA	V. Pande	V. Pande	V. Pande	2
91	Ms. Bhagyashri Suresh Patil	MCA	—	—	B. Patil	1
92	Ms. Reeta Vinod Patil	MCA	R. Patil	R. Patil	R. Patil	2
93	Dr. Sudhir S. Patil	Library	S.	S.	—	2
94	Nikita Gokul Patil	civil	—	N. Patil	N. Patil	2
95	V. S. Pawan	steriod	V. S. Pawan	V. S. Pawan	V. S. Pawan	2
96	Aravesh Sonawane	civil	—	—	—	0