



OFFICE OF THE MISSION DIRECTOR
SAMAGRA SHIKSHA ASSAM
KAHILIPARA, GUWAHATI-19, ASSAM

No. E-222459/I/1513872/2026 31-03-2026

From: Sri Khanindra Das, ACS
Officer On Special Duty,
Samagra Shiksha,
Kahilipara, Guwahati -19 [Assam]

To,

1. Addl. District Commissioner (Education), All Districts
2. District Mission Co-ordinator (All Districts)
3. Inspector of Schools, All Districts

Sub: **Submission of list of students for foundational exposure to Data Science and Artificial Intelligence at IIT, Guwahati**

Madam/ Sir,

With reference to the subject cited above, it is to inform you that, IIT, Guwahati has been conducting special residential training programme to provide meritorious students, foundational exposure to Data Science and Artificial Intelligence along with academic preparation for the Qualifier Test of the **B. Sc (Hons) in Data Science and Artificial Intelligence** which is a non-campus degree in online mode. In this regard, IIT, Guwahati is going to organize **2-week residential training programme** for Government School Student in the **first week of June, 2026**. The programme will be conducted entirely free of cost, including tuition, accommodation and food. The brochure of the degree course is enclosed.

Therefore, you are requested to submit list of 8-10 meritorious students (preferably of Science Stream) of your districts who appeared Class XII examination in 2026 or have already passed Class XII examination, for the training by **20th April, 2026**.

Enclosure: Brochure

Yours faithfully,

[Khanindra Das, ACS]

Digitally signed by
KHANINDRA DAS
Date: 2026.03.31 12:55:19
Officer On Special Duty,
Samagra Shiksha, Assam

Copy to:

1. The Commissioner & Secretary to the Govt. of Assam, School Education Department, Dispur, Assam for favour of kind information.
2. Prof. Hemant B Kaushik, BIS Chair Professor, Civil Engineering and Dear, Online Education and Skill, IIT, Guwahati for kind information.
3. P.A. to Mission Director, Samagra Shiksha Axom for kind appraisal of Mission Director, Samagra Shiksha Axom.

(Digitally Signed)
Officer On Special Duty,
Samagra Shiksha, Assam



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी
Indian Institute of Technology Guwahati

IITG Bachelor of Science (Hons.) in
**Data Science &
Artificial Intelligence**

ONLINE DEGREES

ADMISSION | SEPTEMBER 2026

Prepare yourself for the evolving tech landscape

Learn cutting-edge topics including advanced AI applications and generative AI models from renowned faculty and industry experts.

Enhance your employability

Acquire in-demand skills through industry oriented curriculum, application-based learning, internships, and projects to accelerate your career growth and employability.

Take control of your academic journey

Learn at your own pace and earn credentials at every milestone to shape your education in a way that aligns with your career aspirations.

Immersive Learning

Attend weekly live online lectures, receive tutor support, and work on projects with faculty during campus immersions.

Graduate from India's top technology institute

Earn a recognised degree from a globally renowned institution and become part of a global network of influential alumni.

IITG BSc DSAI

KEY DATES

Application Opens:
10 March 2026

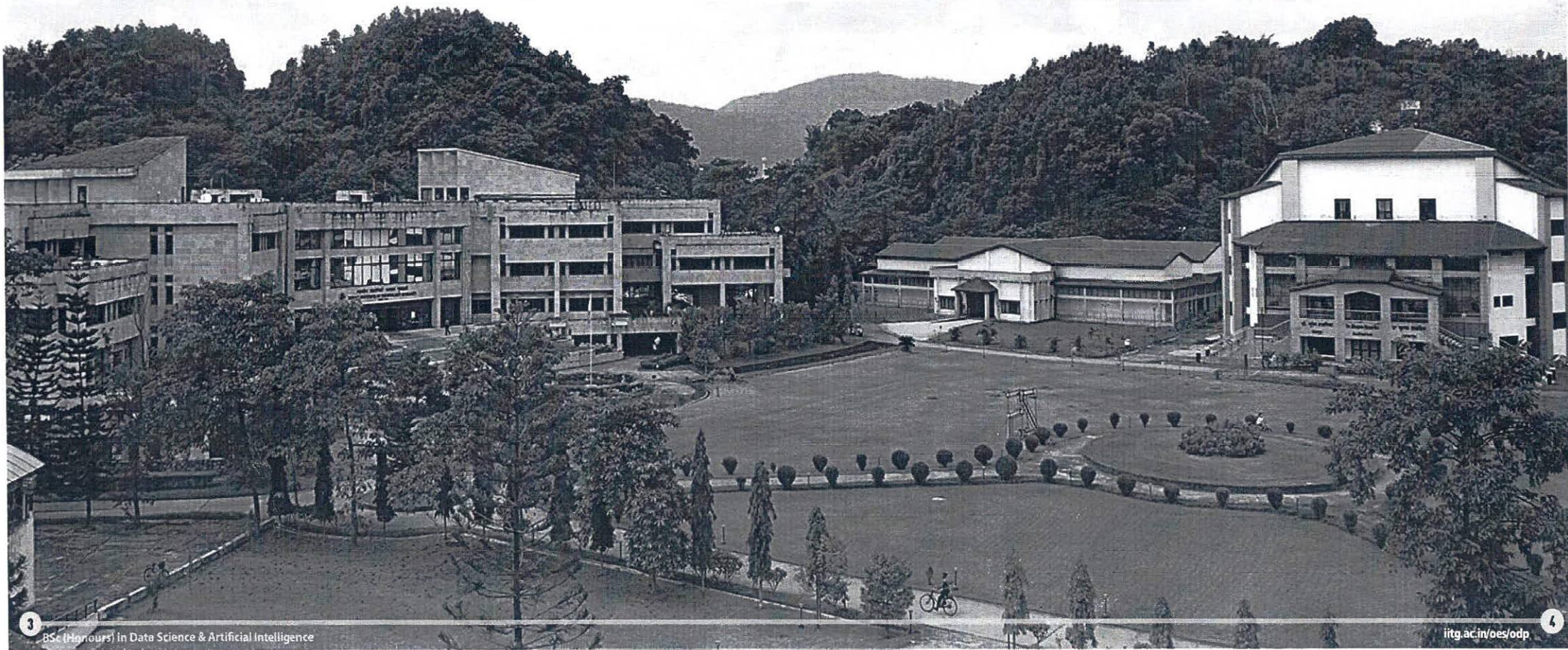
Application Closes:
30 April 2026

Programme Starts:
07 September 2026

Indian Institute of Technology Guwahati

IIT Guwahati is renowned for its exceptional education and research standards. With state-of-the-art infrastructure and a vibrant campus atmosphere, IIT Guwahati offers a wide array of undergraduate, postgraduate, and doctoral programmes that provide students with a well-rounded education that fosters innovation, leadership, and entrepreneurship. Through a strong emphasis on interdisciplinary learning, cutting-edge research, and industry exposure, students are empowered to excel in their chosen fields and make meaningful contributions to the society.

In today's landscape, with numerous opportunities emerging in the fields of data science and artificial intelligence, expertise in these domains has become highly sought after. In light of these developments, IIT Guwahati established the **Mehta Family School of Data Science and Artificial Intelligence** as a dynamic centre committed to nurturing a pool of highly qualified professionals in this emerging field. The school serves as a hub for Data Science and Artificial Intelligence related research, fostering collaboration between industry and academia. This 4 years bachelor's degree programme is offered by the school at IIT Guwahati.



Who is this degree for?

This degree programme offers you a great way to launch or advance your career in data science and artificial intelligence.

The comprehensive curriculum spans entry-level to specialised topics, ensuring you gain current knowledge and practical applications of Data Science and Artificial Intelligence.

The degree programme is flexible and you can tailor it to accommodate your work, family, and other commitments, allowing you to study online at your own convenience and pace.

The programme is suitable for

- High school graduates (from science or non-science backgrounds) who want to build a career in Data Science and Artificial Intelligence.
- Students who are looking to pursue two parallel degrees and enhance their qualifications by earning a second degree from a prestigious institution.
- Working professionals & young entrepreneurs who want to upskill while maintaining their lifestyle and schedule.
- Anyone looking to transition into a new professional career or acquire valuable knowledge in the field.

Current Enrollments: More than 3100

Students from over 70 countries

Indian Students
From all over the country
25% students are JEE qualified

International Students

Mostly from: United States, Canada, China, UAE, Singapore, United Kingdom, Bangladesh, Saudi Arabia, Nepal & Japan

40% students are pursuing dual degree

25% are working professionals

Including doctors and professionals employed in renowned corporates like HCL, Deloitte, Amazon, Marriott International, Maruti Suzuki, and the Indian Army

Why pursue a degree in Data Science & Artificial Intelligence?

30%+

AI & ML specialists, data analysts and data scientists roles expected to grow by over 30% by 2028

(WORLD ECONOMIC FORUM'S FUTURE OF JOBS REPORT 2023)

230.80bn

Market value of the data science field is projected to rise to \$230.80 billion by 2026

(LINKEDIN EMERGING JOBS REPORT 2022)

40.2%

The global AI market is predicted to expand at a CAGR of 40.2% from 2021 to 2028

(GRANDVIEW RESEARCH)

11.5mn

Data Science will create estimated 11.5 million job openings by 2026

(US BUREAU OF LABOUR STATISTICS)

Job Roles

The programme opens up diverse career opportunities in computational and mathematical roles across various industries, including business, finance, education, medicine, engineering, and science.

Engaging in hands-on projects exposes you to cutting-edge industry developments, ensuring you're ready to tackle real-world challenges.

Data Scientist

Data Analyst

Data Engineer

Data Consultant

Machine Learning Engineer

Business Intelligence Analyst

Data Architect

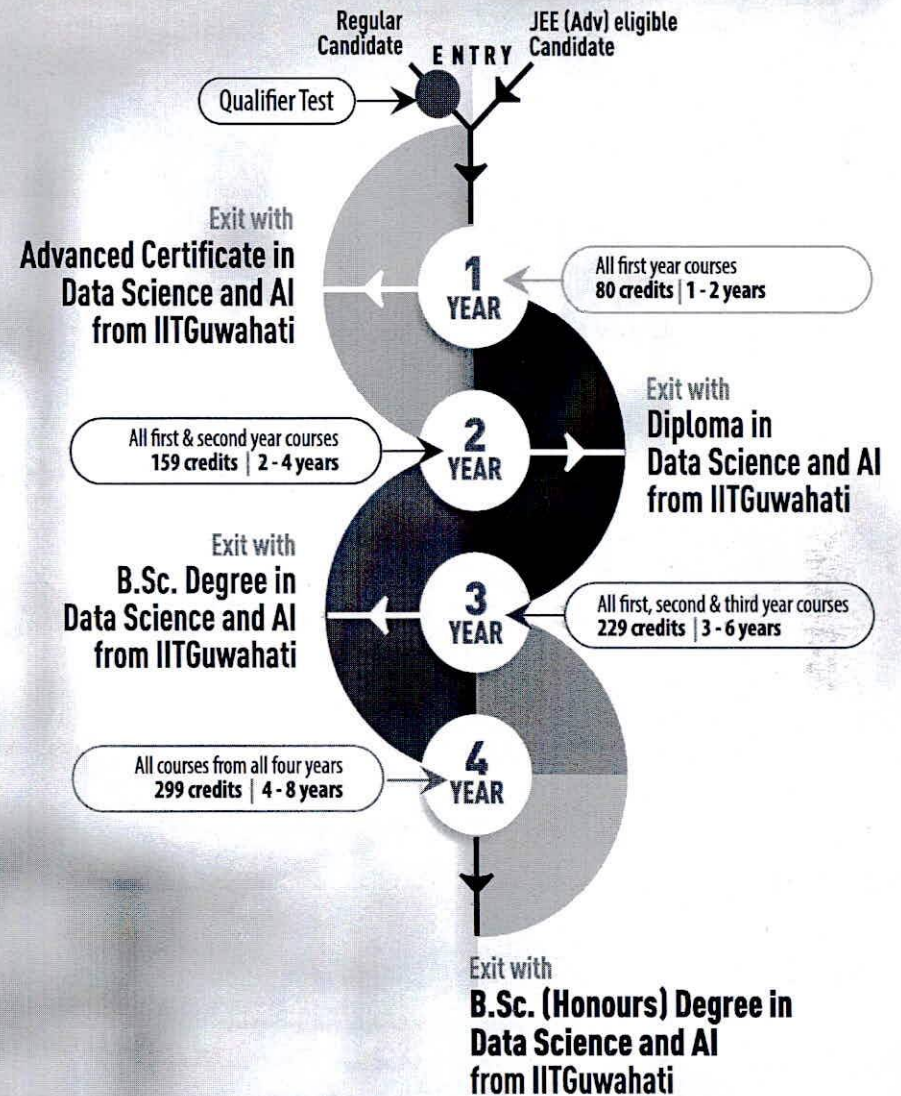
AI Engineer

AI Research Scientist

Big Data Engineer

Programme Design

- This 4-year B.Sc. (Honours) degree is designed to accommodate busy professionals or students pursuing two degrees simultaneously, and offers you the flexibility to complete the programme in up to 8 years.
- The degree comprises a total of 299 credits, which includes fundamental and industry-oriented courses, an industry internship or term projects, and a capstone project.
- There are three terms in a year, and each trimester features 4 courses, with the exception of the final year's trimesters. Trimesters are separated by approximately 2 weeks.
- The credit load per trimester ranges from a minimum of 0 to a maximum of 43 credits. Expect to dedicate an average of 18-20 hours per week to this programme.
- Each course spans 12 weeks and contains 36 hours of learning with engaging videos, insightful case studies, hands-on projects and live lectures by faculty and industry experts.
- Interactive discussions, assignments and internships help you enhance your learning.
- Group assignments and campus visits help you engage with faculty and peers.
- The mandatory capstone project spans three trimesters in the final year.
- The degree rewards learning throughout, with the opportunity to earn credentials after each year. Although the programme's entry point is the same for all students, you may choose to exit at different stages by earning the corresponding certificate upon successful completion of the required coursework.



Rejoin when you're ready

Students who exit the programme after completing a Certificate, Diploma, or B.Sc can rejoin at the appropriate stage after a one-year gap.



Learning Experience

Immerse yourself in an engaging and supportive learning environment, featuring numerous opportunities to interact with faculty, alumni, and peers.

Get a personalised learning experience through courses that include recorded videos, online live sessions, and a discussion hour every week.

Learn from working on projects, with unparalleled access to high-performance computing facilities of two of India's most powerful supercomputers - PARAM Kamrupa and PARAM Ishan.



Coursera Labs

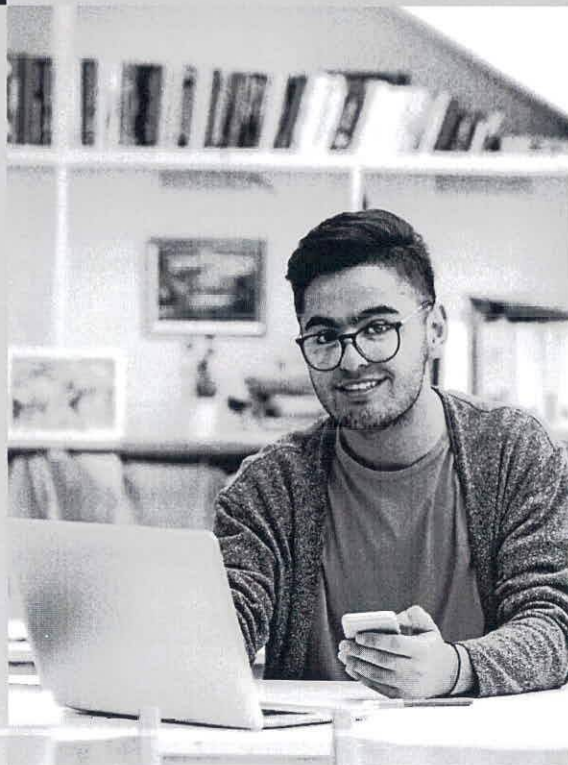
Instantly work on programming assignments using today's most in-demand tools like Jupyter Notebook, RStudio, VS Code, cloud software consoles, and almost any native desktop application.

Coursera Labs allows you to seamlessly work on projects and assignments in a browser without any environment setup or software downloads

Online Live Sessions

Live online lectures by IIT Guwahati faculty and industry experts give an overview of key concepts and complement the recorded video lectures in every course, accompanied by an interactive transcript.

Participate in weekly discussion sessions designed to help you resolve your doubts and gain a stronger understanding of key concepts



Campus Visits

Throughout the programme, you will have the opportunity to visit the IIT Guwahati campus for up to 4 weeks, which can be scheduled over a maximum of 4 visits.

During optional campus visits, you will:

- have an opportunity to meet experts and experience campus life,
- receive hands-on training in various relevant fields,
- consult with faculty members to discuss their project work,
- discuss internship opportunities.



Programme Curriculum

Specialise in cutting-edge topics

- This degree curriculum offers a wide range of courses covering both foundational and advanced topics in Data Science and Artificial Intelligence.
- You will have the opportunity to specialise in cutting-edge tools and their real-world applications, access industry and academic case studies and execute hands-on projects on real-world problems that will help you develop your technical skills and sharpen your problem-solving abilities.

Internships or Term Projects

- Internships can be completed in online or offline mode, while projects will be online only. You may visit the campus during projects or internships work.
- Internships/term projects have a total of 18 credits.
- Projects and internships can be pursued alongside regular trimester courses.
- Internships can begin from the third year onwards, after completing all courses up to the 6th trimester.

Capstone Project

- Gain hands-on experience with real-world projects and tools while collaborating with peers and researchers on innovative projects that prepare you for diverse career paths.
- The total credits for capstone projects is 36, and you can undertake a single project or multiple small projects. You can undertake the Capstone Project and Internship/Term-Project either individually or in a pair.
- Capstone projects can begin only in the fourth year, after completing all courses up to the 9th trimester.
- Both internships/term projects and capstone projects are mandatory for a B.Sc. (Hons.) degree.

Assessments

- Continuous Assessments throughout the trimester will consist of practice assignments, graded assignments, quizzes and term projects.
- Summative Assessment at the end of each course in online or offline mode.
- Provision of supplementary examinations if student fails any course.



Curriculum

FIRST YEAR Trimester I		FIRST YEAR Trimester II		FIRST YEAR Trimester III	
Course	Credits	Course	Credits	Course	Credits
Basic English	6	Linear Algebra	6	AI Basics	6
Data Analysis Basics	8	Data Science: An Introduction	6	Data Structures	6
Introduction to Statistics	6	Computer System Tools	6	Algorithm Design & Analysis	6
C Programming	8	Python Programming	8	Introduction to R	8
	28		26		26

SECOND YEAR Trimester I		SECOND YEAR Trimester II		SECOND YEAR Trimester III	
Course	Credits	Course	Credits	Course	Credits
Relational Database Management Systems	9	Data Mining & Warehousing	6	Data Modeling & Visualization	6
Java Programming	8	Statistical Inferencing	6	Time Series Analysis & Forecasting	6
Optimization	6	Signal and Systems	6	Machine Learning Fundamentals	6
Basic Econometrics	6	Social Media Tools and Techniques	8	Recommender Systems	6
	29		26		24

THIRD YEAR Trimester I		THIRD YEAR Trimester II		THIRD YEAR Trimester III	
Course	Credits	Course	Credits	Course	Credits
Cloud Computing	6	Ethics in AI	6	Soft Skill Enhancement	4
Deep Learning Essentials	6	Elective 2	6	Elective 4	6
Elective 1	6	Elective 3	6	Elective 5	6
Internship-I / Term-Project-I	6	Internship-II / Term-Project-II	6	Internship-III/ Term-Project-III	6
	24		24		22

FOURTH YEAR Trimester I		FOURTH YEAR Trimester II		FOURTH YEAR Trimester III	
Course	Credits	Course	Credits	Course	Credits
Big Data Analytics	6	Basics of Reinforcement Learning	6	Entrepreneurship and Startup	4
Elective 6	6	Elective 7	6	Elective 8	6
Capstone Project - Phase I	12	Capstone Project - Phase II	12	Capstone Project - Phase III	12
	24		24		22

Electives

Applied Theory Electives

Natural language Processing
 Social Media & Text Analytics
 Speech Processing & Recognition
 Vision Intelligence
 Advanced Applications in AI
 AI Based Wireless Communication Systems
 Deep Learning for Computer Vision
 Hardware-Aware Deep Learning

Systems Electives

Machine Learning Framework
 NoSQL
 Big Data on Cloud
 AI Tools and Applications

Business Application Electives

Banking & Financial Service Analytics
 Business Variables Analysis
 Analytics in Securities & Insurance
 Analytics & ML in Financial Technologies
 Financial Valuation and Portfolio Analytics

Open Electives

Design Thinking
 Innovation & Entrepreneurship
 Leadership Essentials
 Business Research Methods
 Agile Development Methods
 Data Driven Digital Manufacturing

Programming Languages, Tools, Libraries & Repositories

- Statsmodels
- Apache Spark
- AWS
- C/C++
- OpenCV
- Apache Airflow
- Excel
- XAMPP
- Rest-api
- MapReduce
- TensorFlow
- JAVA Virtual Machine
- Flask
- SQL
- Keras
- GNU Octave
- Heroku
- Kafka
- MySQL
- Jupyter Notebook
- SpaCy
- Pandas
- Python
- Anaconda
- mongoDB
- Matplotlib
- Tableau
- PyTorch
- Shiny
- NumPy
- PowerBI
- CUDA toolkit
- Apache HBASE
- NLTK
- R Studio
- GitHub
- Sqoop
- Seaborn
- GCC (GNU Compiler Collection)
- Bitbucket
- Hive
- Scikit
- Visual Studio Code
- Latex Documentation
- Flume
- Kubernetes
- Ubuntu OS
- GCP
- PySpark
- Docker
- Windows OS
- Hugging Face (Generative AI tool)