NEWS LETTER – APRIL 2023

Faculty Achievements and Participation:

- Mrs. Pranjali S. Bahalkar has successfully completed NPTEL online Certification on "Machine Learning". Course duration from January to march 2023 and certificate awarded on 14th April 2023.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
PROF PRANJALI S BAHALKAR
for successfully completing the course

Machine Learning

with a consolidated score of **44** %

Online Assignments	13.4/25	Proctored Exam	30.3/75

Total number of candidates certified in this course: **583**

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Jan-Mar 2023
(8 week course)

Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam
FREE ONLINE EDUCATION

Roll No: NPTEL23CS11S35450138   To validate the certificate   No. of credits recommended: 2 or 3

Faculty Participation Certificates
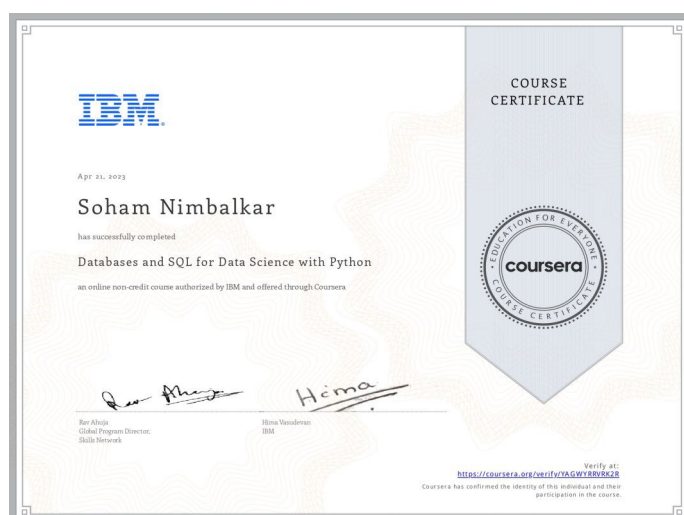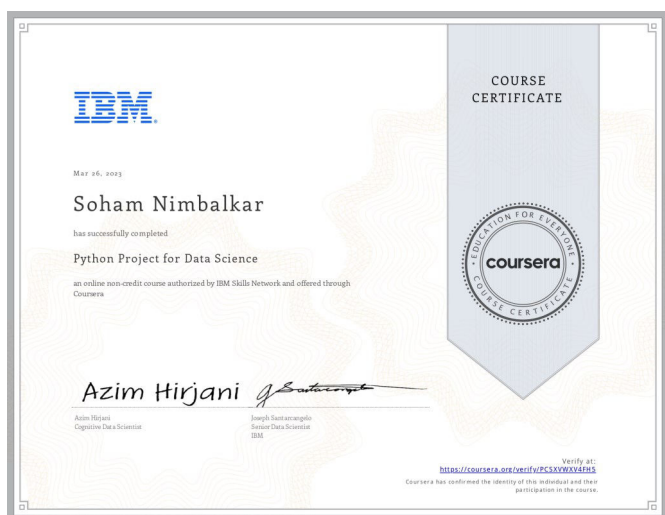
Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department

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Students Achievements:

- Mr. Soham Nimbalkar from SE A div, has successfully completed certification "Python Project for Data Science" and "Databases and SQL for Data Science with Python " an online non-credit course authorized by IBM Skills Network and offered through Coursera on 21st April 2023.

- Ms. Vaishavi Ghodake From SE B div, has successfully completed certification "Learn Python Programming: Step by Step Guide for learner" on 15th April 23.

- Ms. Sakshi Nikan from SE A div, has successfully completed Google certification course "Prepare data for exploration" on 23rd April 2023.

Students Achievements and Participation Certificates

Name of Faculty Coordinator :	Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department

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Students Achievements:

- Ms. Harsh Sawant from TE A div , has successfully completed courses "Data Analysis with Python" on 11th April 2023, "IBM Data Analyst Capstone Project " on 14th April 2023, "Data Visualization with Python" on 12th April 2023, "Databases and SQL for Data Science with Python" on 10th April 2023. an online non-credit course authorized by IBM and offered through Coursera.

Students Achievements and Participation Certificates
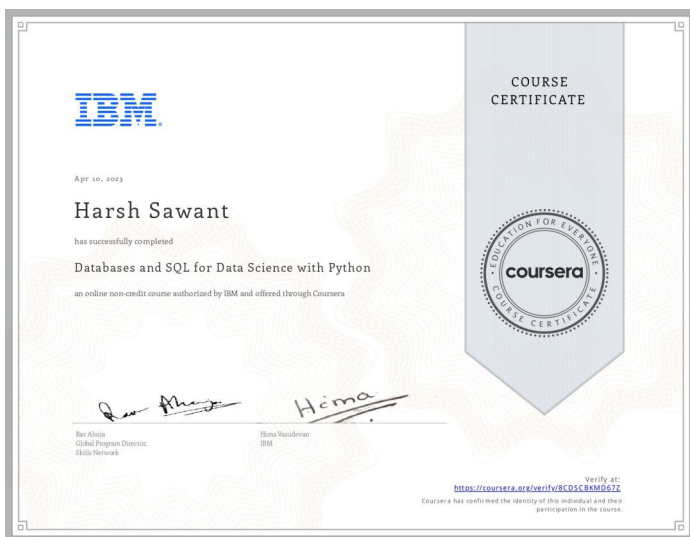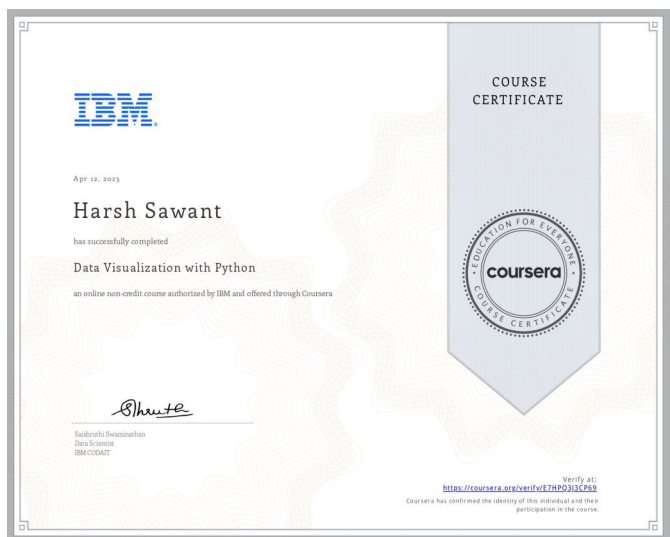
Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department

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Students Achievements:

- Mr. Tanmay Khardekar from TE A has successfully completed Udemy certification course "The complete Python bootcamp from Zero to Hero in Python" on 26th April 2023.

- Ms. Shruti Mahajan, Mr. Vinit Ghadge, Ms. Shweta Khandare from TE A has published article "Overview of Multimedia Cloud" in International Journal for Research in Applied Science & Engineering Technology (IJRASET) Volume 11 Issue IV April 2023.

- Mr. Sachin Kumar Kant from SE B successfully completed online "Django web framework" course on Meta platform on 13th April 2023.

- Mr. Rakesh Sabale from SE B has successfully completed "Django Web Framework" an online non-credit course authorized by Meta and offered through Coursera on 30th April 2023.

Students Achievements and Participation Certificates
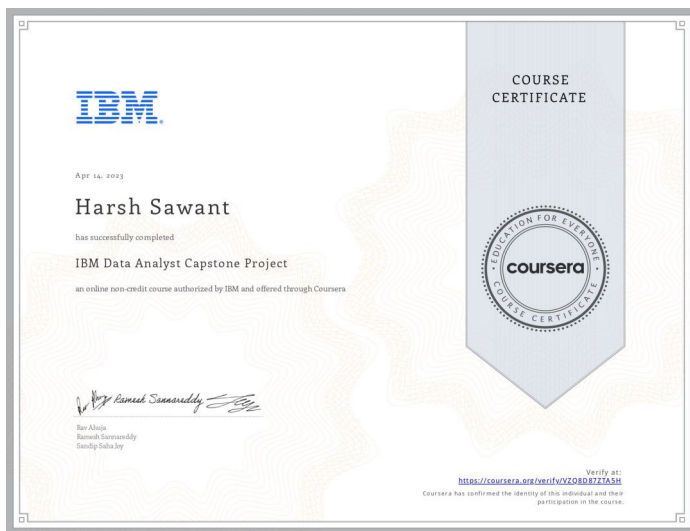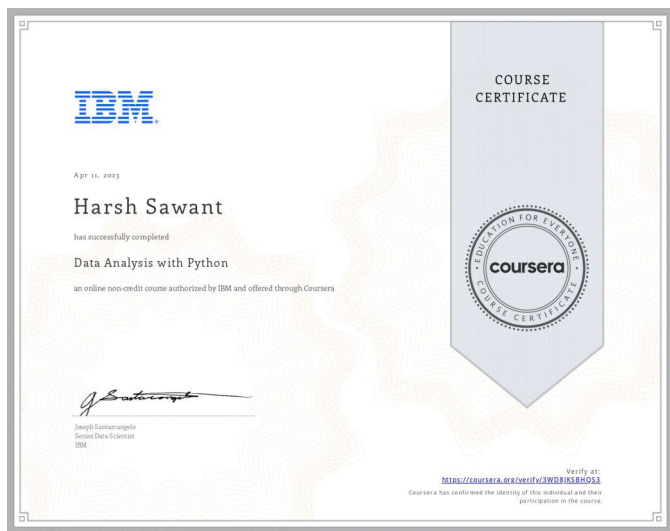
Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department

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Students Achievements:

- Mr. Vardhaman Begani from SE B, has successfully completed Great Learning certification course "Front Web Development" on 26th April 2023. "Basics of C++ " on 21st April 2023. and "Oops in C++ " on 22nd April 2023. guided path on Codestudio.

- Mr. Aditya Kaklij and his team from TE A div, has received $3000 grant (scholarship) from the stark_con blockchain for their project Resmic (Formely dePay).

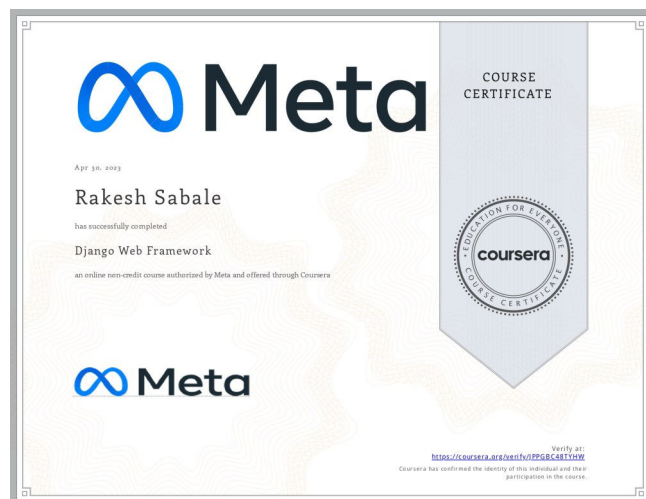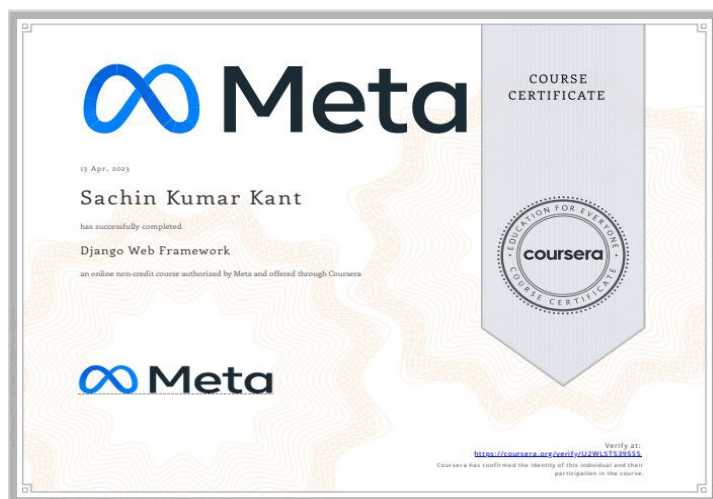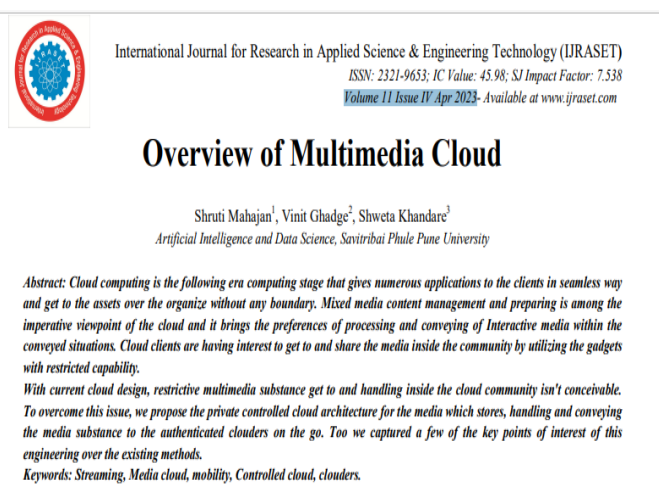Students Achievements and Participation Certificates

Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

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Head of Department

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Students Achievements:

- Ms. Riyal Jain from SE B div, has successfully completed "Machine Learning using python" and " Front end development " an online course offered by Great Learning Academy on April 23.

- Ms. Siddhi Narlawar from SE A div, has successfully completed "Foundations: Data, Data, Everywhere" an online non-credit course authorized by Google and offered through Coursera on 26th April 23.

- Mr. Shrawan Saproo from SE A div, has Awarded for successfully completing the course "Advanced Google Analytics" on 26th April 23.
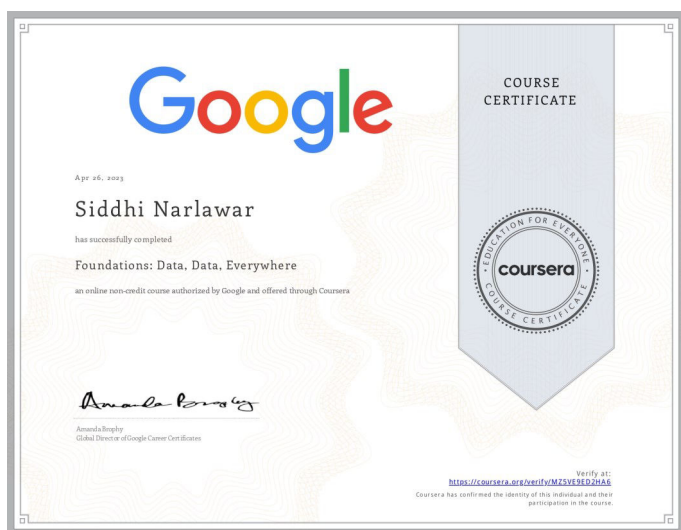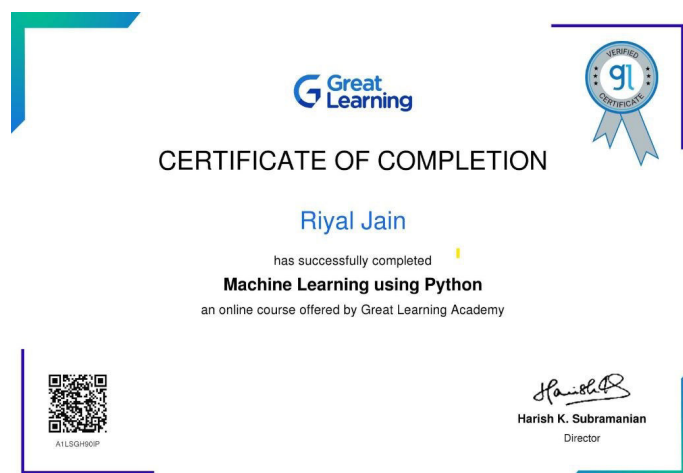
Students Achievements and Participation Certificates
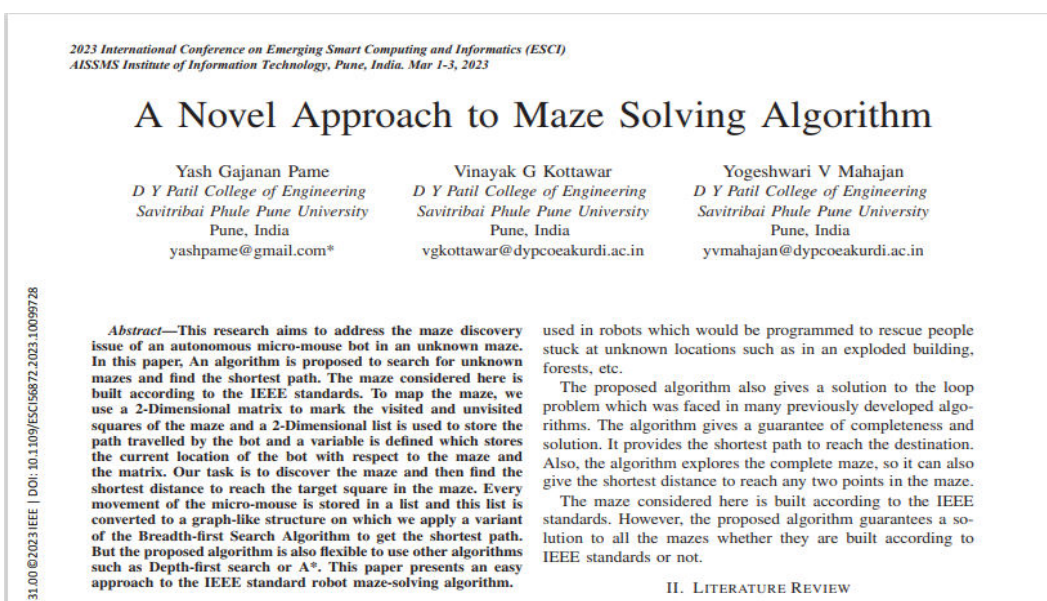
Name of Faculty Coordinator :	Mrs. Trupti G. Lonkar

Dr Vinayak Kottawar
Head of Department

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Students Achievements:

- Mr. Yash Pame from TE A div, has present IEEE International Conference paper "A Novel Approach to Maze Solving Algorithm" conference held on 1st to 3rd march 2023 and paper is available in IEEE Explore Digital Library as conference Proceedings on 20th April 2023.

2023 International Conference on Emerging Smart Computing and Informatics (ESCI)
AISSMS Institute of Information Technology, Pune, India. Mar 1-3, 2023

A Novel Approach to Maze Solving Algorithm

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Abstract—This research aims to address the maze discovery issue of an autonomous micro-mouse bot in an unknown maze. In this paper, An algorithm is proposed to search for unknown mazes and find the shortest path. The maze considered here is built according to the IEEE standards. To map the maze, we use a 2-Dimensional matrix to mark the visited and unvisited squares of the maze and a 2-Dimensional list is used to store the path travelled by the bot and a variable is defined which stores the current location of the bot with respect to the maze and the matrix. Our task is to discover the maze and then find the shortest distance to reach the target square in the maze. Every movement of the micro-mouse is stored in a list and this list is converted to a graph-like structure on which we apply a variant of the Breadth-first Search Algorithm to get the shortest path. But the proposed algorithm is also flexible to use other algorithms such as Depth-first search or A*. This paper presents an easy approach to the IEEE standard robot maze-solving algorithm.

used in robots which would be programmed to rescue people stuck at unknown locations such as in an exploded building, forests, etc.

The proposed algorithm also gives a solution to the loop problem which was faced in many previously developed algorithms. The algorithm gives a guarantee of completeness and solution. It provides the shortest path to reach the destination. Also, the algorithm explores the complete maze, so it can also give the shortest distance to reach any two points in the maze.

The maze considered here is built according to the IEEE standards. However, the proposed algorithm guarantees a solution to all the mazes whether they are built according to IEEE standards or not.

II. LITERATURE REVIEW

Students Achievements and Participation Certificates

Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

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Head of Department

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Department activities:

Department of Artificial Intelligence and Data Science Engineering Organized a industrial visit to "C-DAC, Pashan" for Third Year (Elective NLP subject students) on 24-04-2023. This visit was coordinated by Dr. Bhagyashree Tingare (Assistant Professor –AI & DS) and Mrs. Pranjali Bahalkar (Assistant Professor –AI & DS) and 26 students visited to company.

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Some Glimpses of the Visit

Name of Faculty Coordinator : Mrs. Trupti G. Lonkar

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Head of Department