BERHAMPUR UNIVERSITY

BHANJA BIHAR, BERHAMPUR

AIU – Academic and Administrative Development Centre (AIU-AADC)

Berhampur University in Collaboration with the Association of Indian Universities (AIU) and Department of Computer Science, BU

Organises

One Week Faculty Development Programme (FDP) on

Artificial Intelligence and Big Data Analysis using Python

(in Virtual Mode)
16th to 21st October 2023

Association of Indian Universities (AIU)

The Association of Indian Universities (AIU) is an apex inter-university representative body of universities and other higher education institutions in the country. Established in 1925 as the Inter-University Board (IUB) of India, it acquired its legal status as a registered society in 1967 under the Societies Registration Act 1860 and was rechristened as the Association of Indian Universities (AIU) in 1973. AIU is the second oldest university association in the world next to the Association of Commonwealth Universities which was established in 1913. It has the largest network of universities and other HEIs, with 958 members in India and 17 Associated members from foreign countries. The membership of AIU includes all types of universities e.g., conventional universities, open universities, deemed to be universities, state universities, central universities, private universities and institutes of national importance. Furthermore, Bangladesh, Bhutan, Republic of Kazakhstan, Malaysia, Mauritius, Nepal, Thailand, United Arab Emirates and the United Kingdom are its Associate Members. Since its inception AIU has played a very significant role in the development of higher education in the Country.

Some eminent scholars and visionary leaders like Dr. Sarvepalli Radhakrishnan, Dr Shyama Prasad Mukherjee, Dr Zakir Hussain, and Sir A L. Mudaliar have given leadership to AIU. During such a long journey, AIU has carved a niche for itself by serving the Ministry of Education, Govt of India as a research-based policy advisory body. Being an apex institution, it constitutes an integral part of all major decision-making committees and commissions in the country. As an academic 'think tank' organization, AIU supports the Government as a research-based policy advisory body with the wider mandate of taking up research projects on higher education policy and capacity building. It also acts as a bureau of information on higher education; liaises with international bodies and universities for the internationalization of Indian higher education among many others. The vision of AIU is to emerge as a dynamic service and apex advisory organization in India by undertaking such initiatives and programmes which could strengthen and popularize Indian higher education and promote greater national and international collaboration in higher education, research, extension, sports, youth and cultural activities. It is bestowed with the mission of promoting and representing Indian universities and other higher education institutions through strong liaison with the government, national/international organizations, and sister associations the world over and establishing liaison between/among universities through active support, cooperation and coordination among the member universities and all its stakeholders for quality education, research and other academics and extension activities.

Berhampur University

Berhampur University (BU) is a public-funded state university established on 2nd January 1967. The campus is known as Bhanja Bihar, named after the celebrated poet of Odisha Kabisamrat Upendra Bhanja. Spreading over an area of over 250 acres, the university is 12 kilometres and 5 kilometres away from the Berhampur City and Sea-beach (Bay of Bengal) of Gopalpur, respectively. There are 25 post-graduate departments on the university campus,

that offer specialized subjects and Ph.D./D.Sc. Programs. The University has 173 affiliated colleges with various subjects and disciplines such as Arts, Science, Commerce, Law, Education, Medicine, Pharmacology, Homoeopathy, Ayurveda, Nursing, Military Science, Library Science and Fine Arts. The University is a permanent member of the Inter University Board of India and Sri Lanka as well as that of the Association of Common Wealth University of London.

Academic and Administrative Development Centre (AIU-AADC), BU

The AIU - Academic and Administrative Development Centre (AIU - AADC) is a pioneering initiative of the Association of Indian Universities and Berhampur University, Bhanja Bihar Berhampur directed towards training and capacity building of Faculty members and administrative functionaries of universities for dealing with hybrid/blended learning with a focus on the latest pedagogical reforms. The AIU - AADC at Berhampur University offers short-term training and faculty development programmes aimed at continuous capacity building of key stakeholders (teaching and non-teaching) through virtual, hybrid and physical modes.

PG Department of Computer Science, BU

The Department of Computer Science was established as an independent department in the University in the year 1994. Since then, the Department has played a very important role in imparting Computer education in the state of Odisha in general, and South Odisha in particular. It has produced many computer professionals who have established themselves in the field of education, research, and IT industry both within India and abroad. In the year 2006, the Department widened its scope by introducing the two-year M. Tech. program in Computer Science under self-financing mode. In all these years, the unrelenting services of qualified and dedicated teachers and professionally motivated students have been the strength of the department in imparting quality education. Besides teaching, faculty members are also engaged in active research in different frontier areas of computer science and interdisciplinary areas. About 70 students have received their Ph.D. and D.Sc. degrees from the department in different areas of computer science.

About the FDP Programme

Artificial Intelligence (AI) and Big Data Analysis have emerged as transformative technologies that can reshape today's industries and drive innovation. In order to equip educators with these cutting-edge technologies, this Faculty Development Programme (FDP) has been designed to impart training on the theoretical and practical aspects of AI and Big data analysis. The FDP aims to equip the participants with the essential knowledge and practical skills to teach and integrate AI and Big Data Analysis concepts using Python into their curricula. The FDP will focus on empowering faculty members to effectively teach the related topics to students, fostering a new generation that can harness the power of AI and Big Data for innovation and problem-solving. The primary objective of this FDP is to provide a unique opportunity for educators to dive into the realms of Artificial Intelligence and Big Data Analysis using Python.

The FDP will be facilitated by experts in the fields of AI, data science, and pedagogy and ensure that participants receive personalized guidance and mentorship throughout the program. Participants will also engage in collaborative activities, fostering interdisciplinary learning and sharing best practices across diverse academic domains. The FDP will enable participants to emerge as confident and proficient AI and data analysis practitioners, capable of instilling effective data analysis skills in their students. By bridging the gap between academia and industry practices, this FDP seeks to nurture a future-ready generation, well-equipped to leverage the potential of AI and Big Data Analysis to deal with complex real-world challenges.

Topics to be Covered

Through a combination of interactive lectures and real-world case studies, the FDP will enable faculty members to learn:

- Introduction to AI and Big Data
- Working with Python Programming
- Data cleaning and manipulation and Data Visualization using Python
- Introduction to Machine Learning
- Machine learning algorithms
- Supervised Learning - Regression
- Supervised Learning - Classification
- Unsupervised Learning - Clustering
- Deep Learning
- Natural Language Processing (NLP)
- Principles of Big Data Analysis
- Big Data Analysis using Python
- Big Data Analysis in Social Science and Management Research
- Latest trends and advancements in AI and AI Ethics

Key Deliverables

- ➢ Develop a strong foundational understanding of AI and Big Data Analysis concepts.
- ➢ Master the essentials of Python programming for AI and data analysis.
- ➢ Acquire proficiency in utilizing popular Python libraries and frameworks.
- ➢ Discover innovative strategies to integrate AI and data analysis projects into their respective academic disciplines.
- ➢ Explore the ethical considerations and social implications surrounding the application of AI and Big Data Analysis.

Details of the Faculty Development Programme

Title of the FDP:	**Artificial Intelligence and Big Data Analysis using Python** 16. 10.2023 to 21.10.2023 (One week)
Duration of FDP: Timing of Sessions	Two lecture sessions and one practice session per day: 10.30 am to 12.00 Noon, 3.30 pm to 5.00 pm (lectures with hands-on) and 5.00 pm to 6.00 pm (practice session)
Eligibility:	Faculty members and researchers from various higher educational institutions in India
Mode of delivery:	Virtual mode
Last Date for Registration:	14th October 2023
Registration Fee:	Rs 800
Payment Details	Payment may be made in online mode in favour of AIU Academic and Administrative Development Centre, BU", payable at State Bank of India, Bhanja Bihar, Berhampur (2107); A/c No. 41605496802; IFSC Code: SBIN0002107 (5th to 7th character "0" may be read as Zero

Registration Link:

https://docs.google.com/forms/d/1dUsYJB00Au3lEmzCNWiYifyoBNWwVY0Vtoz9XgH109U/edit

Certification: Certificates will be issued subject to the participants qualifying the following conditions:

a) Minimum 75% attendance.
b) Minimum 50% marks in the test conducted on the last day of the FDP program.

Organizing Committee

Chief Patron
Prof. Geetanjali Dash
Vice Chancellor
Berhampur University

Patrons
Prof. Sushant Kumar Baral
Chairman, PG Council
Berhampur University

Shri Sachidananda Nayak, OAS-(S)
Registrar
Berhampur University

AIU Convener
Dr. Amarendra Pani
Joint Director & Head
Research Division, AIU, New Delhi

AIU-AADC Nodal Officer
Dr. Mrutyunjay Swain
Associate Professor
Department of Economics, BU

Programme Conveners
Dr. Mrutyunjay Swain
Nodal Officer, AIU-AADC, BU
Dr. Susant Kumar Das
Head, PG Dept of Computer Science, BU

Programme Coordinators
Dr. Satya Narayan Tripathy
Dr. Bonomali Khuntia
PG Department of Computer Science, BU

Other Team Members:
Mr Bikash Ranjan Bag
Department of Computer Science
Berhampur University

Dr. Bishnu Charan Behera
Dept. of Economics
Berhampur University

Dr, Saswat Sourav Mohapatra
Department of Biotechnology
Berhampur University

Dr. Raj Kishor Kampa
Mr Desul Sudarsana
Department of Library and Information Science, Berhampur University

Contact Details:
AIU – Academic and Administrative Development Centre (AADC)
HRDC Building, Berhampur University
Bhanja Bihar, Berhampur -760007, Ganjam, Odisha
Email: aiuaadc.bu@gmail.com
Phone: 9724266077, 7978528079
Website: https://buodisha.edu.in

Resource Persons for the FDP:

- **Prof P. S. Avadhani**
  Retd Professor, Andhra University, Visakhapatnam

- **Prof. Siba Kumar Udgata**
  University of Hyderabad

- **Prof. P. Radha Krishna**
  NIT Warangal

- **Prof. Manas Ranjan Patra**
  Retd Professor, Berhampur University

- **Prof. Sachidananda Dehuri**
  F. M. University, Balasore

- **Er Manas Kumar Rath**
  Senior Director Analytics (Brandscapes-Worldwide), Mumbai

- **Er. Anand Rath**
  ML Engg & Product Consultant, Bangalore

- **Dr. Debasish Mohapatra**
  PMEC, Berhampur

- **Dr. Swarupananda Bisoyi**
  MSCBD University, Baripada