# Nirmala Memorial Foundation College of Commerce and Science

#### Report on

# "Student Exchange Program between Nirmala Memorial Foundation (NMF) & Andhra Loyola Institute of Engineering and Technology (ALIET)"

#### **About MoU between NMF & ALIET:**

Nirmala Memorial Foundation, Kandivali East, Mumbai - 400101 and Andhra Loyola Institute of Engineering and Technology (ALIET), Vijayawada, Andhra Pradesh - 520008 signed an Inter-state Memorandum of Understanding (MoU).

This MoU is the initiative of our I/C Principal, Ms. Swiddle D'Cunha. Her vision and efforts have made it possible for our Institution to have an MoU with a prestigious educational institute like ALIET.

#### **About ALIET:**

ALIET has been accredited by NAAC with a Grade "A+ 3.3 CGPA" & is an ISO 9001:2015 Certified Institution.

ALIET is a sister institution of Andhra Loyola College (ALC), Vijayawada, a well-reputed autonomous college started in 1953 and awarded the status 'College with Potential for Excellence' (CPE) by the UGC. Both these institutions, situated in the same 98-acre campus, are registered under the Loyola College Society, Guntur-Vijayawada.

The Institution is recognized by the Government of Andhra Pradesh and affiliated to JNTUK, Kakinada. It offers six UG programs, viz. Computer Science and Engineering (CSE), Electronics and Communications Engineering, Mechanical Engineering, Electrical and Electronics Engineering, Civil Engineering with 60 seats and Information Technology. The College also offers three PG programs viz., two M.Tech. Programs- CSE and DECS (Digital Electronics and Communication Systems).

As a part of NMF & ALIET Inter-state MoU, The Internal Quality Assurance Cell (IQAC) in association with Department of B.Sc. IT and B.Sc. CS, M.Sc. IT of Nirmala Memorial Foundation College of Commerce and Science organised the student exchange program. The three-day program took place from 27<sup>th</sup> April, 2023 to 29<sup>th</sup> April, 2023. In this program, six student delegates, two teaching staff members and Assistant Director of ALIET graced our college with their presence. They participated in various learning activities such as conference, Industrial Visits, workshop and others.

A special team constituting MSc. IT Coordinator Ms. Bhakti Chaudhari, Assistant Professor Ms. Aparna Panigrahy and Program Guide Mr. Shivkumar Chandey, led by the College Management, I/C Principal and IQAC Coordinator Dr. Poonam Kakkad, worked relentlessly round the clock to execute the student exchange program to perfection.

The detailed itinerary of the program is as follows:

#### **Itinerary for Student Exchange Program with ALIET**

#### Day 1- Thursday 27th April, 2023

Time	Itinerary
5.00 a.m.	Arrival at LTT
7.00 a.m.	Arrive at the Hotel (Freshen- up and have breakfast)
9.00 a.m.	Proceed to NMFC
9.15 a.m.	Welcome and Introduction
10.00 a.m.	Workshop on <b>Blockchain Hacking</b> – Mr. Vaibhav Khanderao
1.00 p.m.	Lunch Break
2.00 p.m.	Workshop on <b>Blockchain Hacking</b> and Awarding Certificate – Mr. Vaibhay Khanderao
6.00 p.m.	Proceed to Hotel/ Shopping

#### **Day 2**- Friday, 28<sup>th</sup> April, 2023

Time	Itinerary
7.30 a.m.	Breakfast at hotel
8.15 a.m.	Proceed to <b>MindCraft Software Pvt. Ltd</b> , Andheri East (10.00 a.m.) and <b>Tata Institute of Fundamental Research</b> , Colaba (2.00 p.m.) (enroute sightseeing - Taj Hotel and Gateway of India Shopping (optional), Sea Link )
9.00 p.m.	Enroute dinner
10.00 p.m.	Arrival at hotel

## Day 3- Saturday, 29th April, 2023

Time	Itinerary
7.30 a.m.	Breakfast at Hotel
8.30 a.m.	Proceed to NMFC for Conference
1.30 p.m.	Lunch at NMFC
2.30 p.m.	Proceed to CDPL (Software Testing Firm)
5.00 p.m.	Proceed to Hotel/ Shopping
8.00 p.m.	Dinner at Hotel

## Day 4- Sunday, 30<sup>th</sup> April, 2023

Time	Itinerary
8.00 a.m.	Breakfast at Hotel
11.00 a.m.	Checkout and Proceed to LTT for departure to Vijayawada 1.20 p.m. (Packed lunch will be served)

**Aim:** The aim of the student exchange program was to gain, share and exchange the knowledge with each other and to familiarize the delegates of ALIET with the culture of Maharashtra.

#### **Welcoming the AILET Delegates to Mumbai**

The day started from the time we welcomed the ALIET Delegates to Mumbai. Program Guide Mr. Shivkumar Chandey got the opportunity to receive and welcome the following members of ALIET at LTT Railway Station, Kurla early morning at 4.20 a.m. with the token of floral bouquet.

#### ALIET Management Members:

1. Rev. Fr. Ravindra, Assistant Director, ALIET

#### ALIET Faculty Members:

- 2. Dr. Rajendra Babu, HOD, CSE Department
- **3.** A. Koteswara Rao, Professor, CSE Department

#### ALIET Student Delegates:

- **4.** D. Ramu
- **5.** Paradha Saradhi
- 6. D. Mohammed Javed
- 7. J. Viswa Chandra
- 8. S. V. Shiva Reddy
- 9. A. Vasanth Kumar



#### **Checking in the Royal Hometel Suites**

Our College Management ensured that the visiting delegates from ALITET were welcomed warmly and had a pleasant, comfortable stay. Luxurious and spacious suites at Royal Hometel Suites at Mira Road East were booked for them for the entire stay. The hotel was in vicinity of the college, and well-connected to ensure convenience while travelling.



#### **Welcoming the AILET Delegates to the NMFC Campus**

Ms. Rhucha Patil was in charge of the grand welcome extended to the ALIET delegates. Lezium dance and the traditional Dhol beats filled the air to welcome the guests at the main entrance.

The delegates were mesmerised by the rich glimpse they got into the tradition of the Maharashtra state. Program guide Mr. Shivkumar Chandey escorted the delegates to the Principal's cabin. The delegates were then escorted to the miniauditorium for the inaugural ceremony.







#### **Inauguration of the Program**

The college organised a grand inaugural ceremony to welcome the delegates of ALIET in the mini-auditorium. The delegates and the Management members were welcomed warmly by the cheerful audience.

Mr. Shivkumar Chandey commenced the program with a formal welcome and introduction of the delegates.

Guest of Honour Rev. Fr. Ravindra, Assistant Director of ALIET was felicitated by the I/C Principal Ms. Swiddle D'Cunha. She then felicitated Co-ordinator of CSE Department, ALIET.

Faculty of CSE Department was felicitated by Dr. Poonam Kakkad, IQAC Coordinator & Coordinator of BAF & BMS Departments.

Student delegates were welcomed and they introduced themselves. They were presented with mementos.

The I/C Principal shared her valuable insights and expressed her happiness for the collaboration of both the institutes. She said that the college is looking forward to the promising outcomes that this collaboration is going to yield, and how much it would benefit the student community.

Rev. Fr. Ravindra was requested to share his precious views. He expressed great happiness at the prospects of the collaboration. He appreciated the Management, the Principal and staff members for the program. He thanked our institute for extending a warm welcome at such a grand level. He reiterated how

well the arrangements were made by our college. He said he was deeply impressed by the involvement of the College Management in this initiative.

The introduction of the college was subsequently given by Mr. Chandey. A PPT and a virtual tour video of the college were shown.

Students of NMFC also delivered two cultural performances, which were highly appreciated by the audience and the guests.

The student delegates of ALIET and MSc. IT students then proceeded to Lab 4 for the workshop on Blockchain Hacking.

Rev. Fr. Ravindra and staff members of ALIET took a tour of the college, accompanied by Mr. Ajit Desai, Member of the Management, I/C Principal and the IQAC Coordinator.





#### **Workshop on Blockchain Hacking:**

This course was designed to provide students with a basic to intermediate level understanding of Smart Contract hacking using Blockchain. It covered the fundamentals of blockchain technology and Ethereum, the most popular blockchain platform for smart contract development. Students learnt about the security vulnerabilities in Smart Contracts and explore the techniques used for exploiting them.

#### **Topics covered during workshop:**

- Overview of Blockchain Technology
- Introduction and Overview of Ethereum Platform
- Understanding Ethereum and Smart Contract Development
- Smart Contract Vulnerabilities
- Common Smart Contract Vulnerabilities
- Exploiting Smart Contracts
- Overview of Smart Contract Hacking Techniques
- Best Practices for Smart Contract Development
- Secure Coding Guidelines for Smart Contracts
- Mitigating Smart Contract Vulnerabilities

Various topics were covered during this hands-on and live workshop. This workshop was highly technical and organized with the aim of covering wide varieties of advance topics for the students.

#### Report

Ms. Aparna Panigrahy, Asst. Professor had felicitated the resource person Mr. Vaibhav Khanderao, CEO of Scienox Technologies and initiated the workshop with a small welcome address and welcomed all the attendees of the program.

The Blockchain Hacking workshop was conducted for the students of NMFC & ALIET by the speaker Mr. Vaibhav Khanderao.

The Speaker had demonstrated the topics live during the session covering majority of the topics from basics to advanced level. Students learnt a lot during this one day hands-on workshop and given amazing feedback for the speaker and course contents.

Students were very interactive and asked many questions on the blockchain, ethereum, smart contracts, etc.

Students were given an assignment, which was the criteria to grab the course completion certificate. All the students have submitted the assignments and made it possible to achieve the certificates.

Ms. Swiddle D'Cunha, I/C Principal presented the Certificate of Course Completion to all the attendees. Mr. Shivkumar Chandey, Asst. Professor, assisted the I/C Principal for the same.

Resource Person: Mr. Vaibhav Khanderao, CEO, Scienox Technologies

**Date & Time:** Thursday, 27<sup>th</sup> April 2023 [10.00 a.m. to 06.00 p.m.]

**Venue:** Computer Lab No. 04, 3<sup>rd</sup> Floor

Attendees: ALIET Students & NMFC M.Sc. Students

No. of beneficiaries: 12

**Take away from workshop:** Course Completion Certificate

**Criteria to get the certificate:** Assignment Submission





#### Day 2

#### Industrial Visit to MindCraft Software Pvt. Ltd, Andheri East

Day 2 started with an Industrial Visit to **MindCraft Software Pvt. Ltd**, Andheri East. Mr. Shivkumar Chandey and Ms. Aparna Panigrahy accompanied the AILET delegates to the venue and took care of all the arrangements.

Learning Outcome:

Resource Person: Ms. Ruchita Doshi, HR Personnel.

Date & Time: Friday, 28<sup>th</sup> April 2023. [10.30 a.m. to 12.30 p.m.]

Venue: MindCraft Software Pvt. Ltd. Campus

Attendees: ALIET Students & NMFC M.Sc. Students

No. of beneficiaries: 12

#### Outcome:

• Gaining new insights into the latest technology like Software Testing

- Product lifecycle of their applications
- Business processes and system analysis
- Personality Development
- Tips & Tricks to crack the interview

Sincere thanks to Ms. Dhara Desai, Secretary, NMFC, for coordinating with MindCraft Software Pvt. Ltd. officials and taking care of the necessary arrangements.





A Visit to St. Xavier's College, Fort, Mumbai

The ALIET delegation, accompanied by the I/C Principal, paid a visit to St. Xavier's College, a part of the Society of Jesus and founded by Jesuits. The Loyola College Society is also a part of the same community.

Rev. Fr. Ravindra and I/C Principal's efforts resulted in the signing of a valuable MoU between St. Xavier's College and NMF. After this visit, the group proceeded to Tata Institute of Fundamental Research, Colaba.





#### Industrial Visit to Tata Institute of Fundamental Research, Colaba

I/C Principal Ms. Swiddle D'Cunha, Ms. Vaishali Mishra, Coordinator of BSc. IT and BSc. CS, Ms. Bhakti Chaudhari and Mr. Shivkumar Chandey along with the ALIET delegation and NMFC students visited TIFR, the premiere research institute of the TATA Group.

The scenic location of the institute, nestling by the sea amid tranquillity was a sight to behold.

TIFR is a National Centre of the Government of India, under the umbrella of the Department of Atomic Energy. It is a deemed University renowned for academic excellence and for awarding degrees for master's and doctoral programs. The Institute was founded in 1945 with support from the Sir Dorabji Tata Trust under the vision of Dr. Homi Bhabha. TIFR carries out basic research in physics, chemistry, biology, mathematics, computer science and science education. Their main campus is located in Mumbai, with centres at Pune, Bengaluru and Hyderabad.

Sincere thanks to Ms. Bhakti Chaudhari for coordinating with TIFR officials and looking after the industrial visit management.

Tour Guide: Dr. Tulsiram, Head Pelletron Department

Resource Person: Dr. Piyush Srivastava, Professor, Computer Science

Department

Date & Time: Friday, 28<sup>th</sup> April 2023. [02.00 p.m. to 06.00 p.m.]

Venue: TIFR Institute

Attendees: ALIET Students & NMFC M.Sc. IT Students

No. of beneficiaries: 12

#### Learning Outcome:

- Attended the technical session on Machine Learning
- Got the opportunity to visit their various Research Labs
- Understood the working of Pelletron
- Seen various equipment which are used for conducting research
- Visited Low Temperature Facility
- Seen the various applications of Liquid Nitrogen
- Attended an informative seminar on "Inside the Moon Gallery"

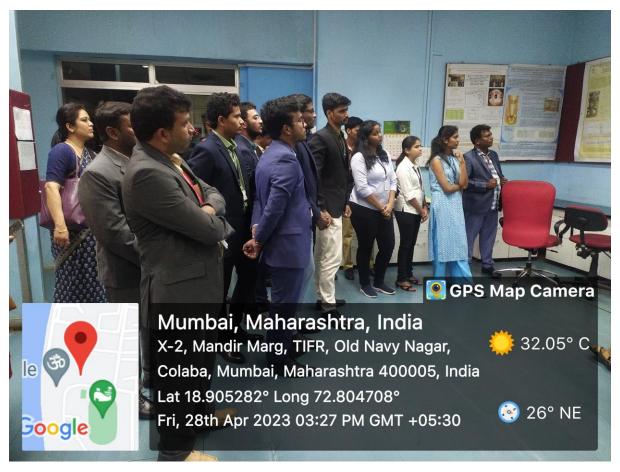
Upon completion of the visit, representatives of NMFC indulged the ALIET delegates with a short, yet delightful customary recreation stint that Mumbai is famed for. Everyone enjoyed the breath-taking views and the sunset in the vicinity.

Program Guide Mr. Shivkumar Chandey proposed a formal Vote of Thanks to the Tour Guide, Dr. Tulsiram and the TIFR officials.

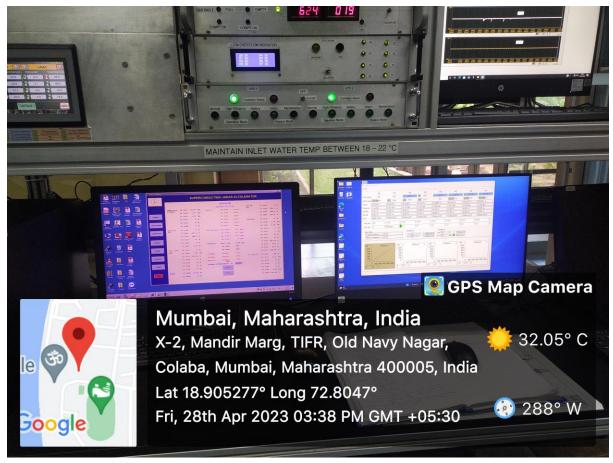
The visitors also enjoyed shopping in the bustling and famed Colaba Causeway area. They saw the iconic Hotel Taj, The Gateway of India and beheld the beauty of the location, which they captured in photographs.

















#### Day 3

## One day International Conference on Multidisciplinary Approach to Innovation Prospects and Challenges in Modern Business Landscape

The IQAC and Research Cell of Nirmala Memorial Foundation College of Commerce and Science (NMFC) in Collaboration with the University of Mumbai and the Department of MBA of Andhra Loyola Institute of Engineering and Technology (ALIET) organised a one-day International Conference on Multidisciplinary Approach to Innovation Prospects and Challenges in Modern Business Landscape.

The conference was scheduled for Saturday, 29th April 2023. About 50 participants registered for the conference, and 16 full-length research papers were submitted by the researchers. The papers were received from different states like Madhya Pradesh, Karnataka, Andhra Pradesh, and many more.

In the inaugural function, the Principal of NMFC addressed the audience about the objective and theme of the conference and Rev. Fr. Ravindra from ALIET gave the opening remarks. Mr. Manoj Chouhan, Vice President (Borivali Zone) of Adani was the Chief Guest for the function and addressed the audience with his expertise. Also, Dr. Rajesh Modi was a keynote speaker for the inaugural and shared his views on the conference.

The two technical sessions were conducted simultaneously and selected researchers were shortlisted to present their ideas. Technical Session 1 was hosted by (ALIET) wherein four researchers presented their idea. The session was chaired by Dr. C B Venkata Krishna Prasad. The best presenter award was presented to Ms. Ninoshka D'Silva. Technical Session 2 was hosted by (NMFC) where 6 researchers presented their ideas. The session was chaired by Dr. Yagnesh Dalvadi. Ms. Riddhisha Tarkari received the first best research presenter award and the second award was shared between Mr.Ramu, Mr. Padasare, Javeed, and Vishwa.





#### **Annual Ganesh Pooja at NMFC**

The Annual Ganesh Pooja had been organised by the Management on the same day.

The ALIET delegates took blessings of Lord Ganesha and also enjoyed the various activities like Antakshari, garba and singing of songs. They were touched by the hospitality accorded to them by NMFC. They were delighted by the sumptuous traditional Gujarati cuisine for lunch. After the lavish lunch the group then proceeded to one more industrial visit to "Cinute Digital Pvt. Ltd. - A Premier Software Testing Training Institute (CDPL)".





## Industrial Visit to "Cinute Digital Pvt. Ltd. - A Premier Software Testing Training Institute (CDPL)", Mira Road, Mumbai

Ms. Vaishali Mishra, Coordinator of BSc. IT and BSc. CS, Ms. Bhakti Chaudhari, Coordinator of M.Sc. IT and Mr. Shivkumar Chandey along with the ALIET delegation and NMFC students visited CDPL, a premier software testing training institute.

Mr. Shoeb Shaikh, Automation Test Engineer & Head of Training, initiated the technical session on Software Testing by interacting with students. During his interaction he put light on fundamentals of Testing, Job opportunities, Difference between Manual and Automated Testing, etc.

The next part was very informative and interesting. After building and discussing fundamentals he demonstrated the live automated testing on various popular websites. This part of IV gained the students' attention and motivated them to make a career in Software Testing Sector.

Then the next segment came where we took their campus tour, saw their testing labs, and various heterogeneous devices used for testing purpose. This was an amazing experience. ALIET student delegates and staff members appreciated the tour and also discussed future prospects with the officials of CDPL.

Finally, Program Guide Mr. Shivkumar Chandey proposed a formal Vote of Thanks to the speaker and the officials of institute for providing the opportunity to visit such a Premier Software Testing Training Institute.

Special thanks to Ms. Bhakti Chaudhari for coordinating with CDPL officials and making the necessary arrangements.

Speaker: Mr. Shoeb Shaikh, Automation Test Engineer & Head of Training

Date & Time: Saturday, 29<sup>th</sup> April 2023. [03.00 p.m. to 05.00 p.m.]

Venue: CDPL Institute

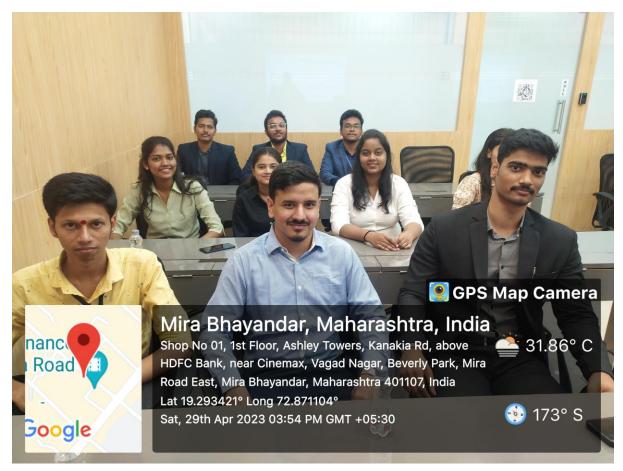
Attendees: ALIET Students & NMFC M.Sc. Students

No. of beneficiaries: 12

#### Learning Outcome:

Acquired knowledge about the importance of Software Testing

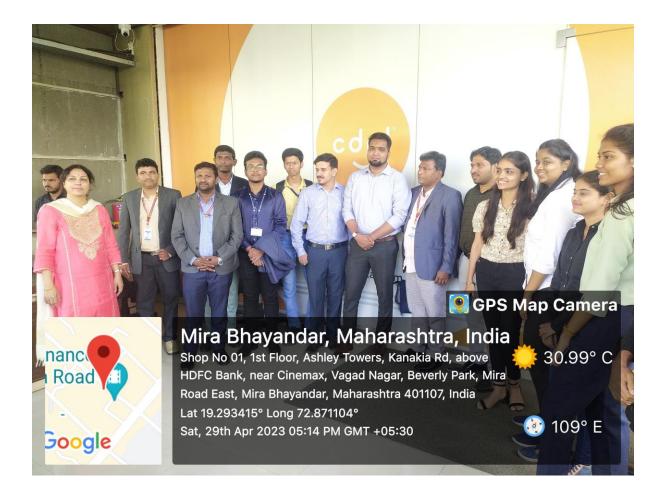
- Learning about the various packages, tools and techniques used for Testing
- Understanding the difference between Manual Testing and Automated Testing
- Opportunity to see the automated testing live on shopping cart websites like Flipkart and Amazon
- Tour to their testing Labs
- Opportunity to see the testing kits and dozens of Laptops, Mobiles Phones, Tablets kept specifically for Cross Platform and Cross Operating System testing
- Explored the job opportunities on Job Portals
- Careers in Software Testing











## Departure of the ALIET Delegates upon Successful Completion of the Student Exchange Program

After an enriching, fruitful and memorable interstate student exchange endeavour organised by NMFC for Andhra Loyola Institute of Engineering and Technology, it was time for the delegates to depart with new learning and memories.

Mr. Shivkumar Chandey looked after the final lap of the visit. Mr. Milan Desai, Member of the Management, was also present during the check-out procedure, and to bid a formal farewell. Mr. Shivkumar Chandey extended the Vote of Thanks to the ALIET delegates, who expressed deep appreciation and said they were touched by the love and warmth extended to them by the Management of NMFC.

Our Management had made special arrangements for refreshments and lunch for their return journey. Before reaching the LTT railway station, Kurla, fresh fruits, snacks, desserts and packed lunch for the ALIET delegates was picked up from a hotel on the way. They boarded the train at 1.20 p.m. happily.

The three-day student exchange program may have concluded, but it has forged a precious bond with ALIET and has opened new avenues for exchange of knowledge, opportunities and scope for both the institutes.



