#### REPORT ON

#### INTERNATIONAL EXPERIENCE PROGRAM - 2025

**UNDER TAKEN AT** 



AIAT, Australian Institute Of Advanced Technology

DATE: 19<sup>TH</sup> JULY, 2025 TO 22<sup>nd</sup> AUGUST, 2025



TRACK: INFORMATION TECHNOLOGY

PREPARED BY:

Tirth Gohil – 22IT401

#### **ACKNOWLEDGEMENT**

I extend my sincere gratitude to Gujarat Technological University (GTU) for offering me this prestigious opportunity to participate in the International Experience Program (IEP) 2025 at the Australian Institute of Advanced Technologies (AIAT), Adelaide.

I express my heartfelt thanks to Dr. Indrajit Patel Sir, Principal of BVM Engineering College, for his constant encouragement and guidance. I am especially grateful to Prof. (Dr.) Kaushika Patel Ma'am, Associate Dean – International Collaboration (BVM), whose tireless efforts and vision made this collaboration possible. Her continuous support, motivation, and coordination throughout the program were invaluable. I also sincerely thank (Dr.) Keyur Brahmbhatt Sir, Head of my Department, for his valuable support and encouragement, which greatly inspired me throughout this international learning experience.

I would also like to thank the faculty and coordinators at the Australian Institute of Advanced Technologies for their warm hospitality, well-structured academic sessions, and meticulously planned visits and activities. Their professionalism and dedication ensured that my learning experience was both enriching and enjoyable.

My gratitude also goes to all faculty mentors, coordinators, and team members who guided me during the sessions, workshops, and assessments. Special thanks to my peers and fellow participants for their cooperation, teamwork, and shared spirit of learning.

Finally, I thank my parents and well-wishers for their encouragement, support, and blessings, without which this international learning experience would not have been possible.

#### **ABSTRACT**

The International Experience Program (IEP) 2025, organized by Gujarat Technological University in collaboration with the Australian Institute of Advanced Technologies (AIAT), Adelaide, provided me with a unique opportunity to experience academic learning, practical exposure, and cultural immersion on a global platform.

Spanning from 19th July 2025 to 22nd August 2025, the program combined technical coursework, project-based learning, and excursions, ensuring a holistic balance between engineering education and international awareness. The academic sessions primarily focused on **Machine Learning**, **Mobile Computing & Wireless Communication**, and a **Summer Internship**, enabling me to gain hands-on experience in emerging technologies, strengthen my technical skills, and apply knowledge to real-world projects.

Beyond academics, I participated in enriching excursions and cultural visits to places such as the **Parliament of South Australia**, **Victor Harbor**, **Barossa Valley**, **Adelaide Zoo**, **Henley Beach**, **and Mount Lofty**, along with attending events like **Garba Night** at AIAT. These visits and experiences offered valuable lessons on how technology, culture, and society are interconnected, while also creating lasting memories of international exposure.

Equally significant were the project presentations, where I developed applications like a **Bird Voice Predictor using Machine Learning** and a **Speed & Proximity Detection System** using IoT hardware. These projects enhanced my problemsolving, technical integration, and presentation skills, while giving me the confidence to perform in an international academic environment.

Overall, the IEP successfully bridged classroom learning with practical exposure, enriching me academically, professionally, and personally. It instilled in me the confidence to face global challenges, reinforced the importance of international collaboration, and created lifelong memories of learning, culture, and growth.

## Week-1

Dates: (19th July - 26th July)

Name of Event/Activity: First Meet of the IEP

• Date of Activity: 19th July 2025

• Place of Activity: Ahmedabad International Airport



Our first gathering for the International Experience Program (IEP), organized by Gujarat Technological University (GTU), took place at Ahmedabad International Airport. This marked the official beginning of our journey, where all selected students assembled, completed the initial formalities, and were briefed about the program. The meeting not only set the tone for the upcoming exchange but also created an atmosphere of excitement and anticipation as we prepared to embark on this international academic experience.

- Name of Event/Activity: First day of college
- Date of Activity: 22<sup>nd</sup> July 2025
- Place of Activity: Australian Institute of Advanced Technology (AIAT)



This image captures our first moments at the Australian Institute of Advanced Technology (AIAT), where we were warmly welcomed and introduced to the faculty and staff members who will be guiding and supporting us throughout the IEP academic journey. As part of this orientation, we also had the privilege of meeting **Dr. Farzad Sanati**, the professor under whose mentorship we will be learning during this program. This interaction set a positive tone and gave us valuable insight into the academic environment we would be engaging with over the course of the program.

Name of Event/Activity: Using Public Transport.

Date of Activity: 23<sup>rd</sup> July 2025
 Place of Activity: Grenfell Road



We collected our **Metro Cards** and travelled to the **Australian Institute of Advanced Technology (AIAT)** for the first time using the public transport bus as our primary mode of commute. This experience provided us with valuable exposure to navigating through Adelaide—not only for reaching the university but also for exploring different parts of the city. It marked the beginning of a routine where we would start our day early, board the bus, and commute together to college. This daily journey soon became an integral part of our IEP experience, fostering both independence and familiarity with the local culture.

- Name of Event/Activity: Adelaide Arcade Experience
- Date of Activity: 25<sup>nd</sup> July 2025
- Place of Activity: Adelaide Centre Ward



This marked our **first extracurricular activity** during the International Experience Program, where our group visited **Rundle Mall** to enjoy arcade games and bowling together. The outing turned into a lively and memorable experience, filled with laughter, cheering, and friendly competition as we supported and motivated one another. Beyond the fun and excitement, this activity played an important role in helping us bond more closely as friends and teammates, strengthening our sense of camaraderie.

The day proved to be refreshing and meaningful, as it gave us a much-needed break from our academic schedule while allowing us to experience the local culture and leisure activities in Adelaide. This balance between studies and recreation added great value to our overall IEP journey.

# Week -2

Dates: (27<sup>th</sup> July – 3<sup>rd</sup> August)

Name of Event/Activity: Go-Karting

• Date of Activity: 27<sup>th</sup> July 2025

• Place of Activity: Kart-Mania



On our day off, we had the opportunity to take part in an exhilarating **Go-Karting experience**, an activity that the entire group had been eagerly anticipating. The high-speed rides and sharp turns created an atmosphere filled with excitement and adrenaline, making it one of the most thrilling moments of our stay.

- Name of Event/Activity: Social Meet
- Date of Activity: 29<sup>th</sup> July 2025
- Place of Activity: Australian Institute of Advanced Technology (AIAT)

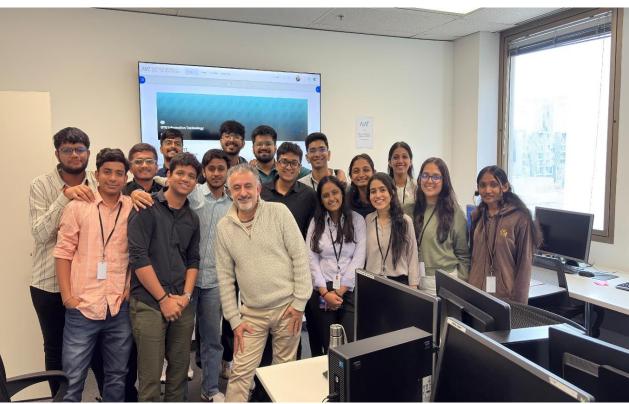


It was a wonderful opportunity to interact with the **students and faculty members of AIAT** in a friendly and welcoming environment. The session was thoughtfully designed to include introductions, cultural exchanges, and casual conversations, which created a comfortable space for open dialogue.

Through this interaction, we were able to **build meaningful connections**, share perspectives, and gain valuable insights into the academic and social life of university students in Australia. The experience not only broadened our understanding of a new culture but also encouraged mutual respect and appreciation, making us feel more integrated into the AIAT community.

- Name of Event/Activity: Presenting ML projects
- Date of Activity: 1st August 2025
- Place of Activity: Australian Institute of Advanced Technology (AIAT)





After completing two weeks of intensive Machine Learning education at AIAT, we underwent a structured assessment that evaluated both our technical understanding and our ability to present knowledge effectively. The assessment was designed around student-led projects, where each participant was required to conceptualize, design, and implement a small-scale application of machine learning. The final stage involved delivering a formal presentation in front of the faculty members as well as fellow students from the same batch.

This evaluation tested multiple dimensions of our learning journey. It was not only about demonstrating technical accuracy but also about showcasing our ability to think critically, solve real-world problems, and communicate our findings clearly. Standing before an audience of peers and educators challenged us to overcome nervousness, refine our communication style, and develop confidence in presenting our work.

As part of this evaluation, I developed a **Bird Voice Predictor project**, a unique application of machine learning that combined environmental science with technology. The project focused on the **classification of bird species based on their vocal patterns**. The process involved collecting real-world bird audio samples, extracting meaningful features such as **MFCCs (Mel-Frequency Cepstral Coefficients)**, generating spectrograms, and training machine learning models to recognize patterns in the sounds. This allowed me to appreciate the interdisciplinary nature of machine learning, where computer science techniques can be applied to domains like biodiversity monitoring and wildlife conservation.

Overall, the assessment was much more than an academic checkpoint—it became a platform for **public speaking**, **creativity**, **and professional growth**. It pushed me to step out of my comfort zone, sharpen my technical and interpersonal skills, and develop the confidence to express myself in an international academic setting.

## Week-3

Dates: (4th August - 11th August)

Name of Event/Activity: Fire Alarm Experience

• Date of Activity: 5<sup>th</sup> August 2025

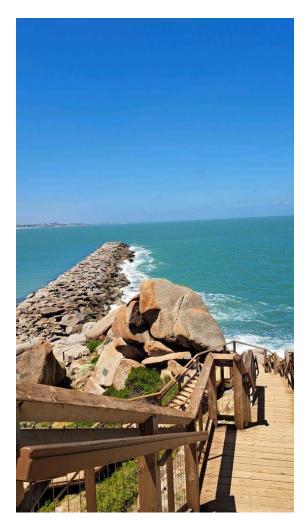
Place of Activity: Tafe SA, Regency Campus



During our stay, we also witnessed an unexpected incident when a **fire alarm** was triggered in our block due to someone's mistake. Within minutes, the **fire** brigade arrived promptly and ensured that the situation was under control.

Although it turned out to be a false alarm, the experience gave us a glimpse into the **efficiency and preparedness of Australia's emergency response system**. It highlighted the importance of safety protocols, quick action, and discipline during emergencies. For many of us, it was a first-hand lesson in how seriously public safety is prioritized, and it left us with a sense of reassurance and respect for the system.

- Name of Event/Activity: Harbour Town
- Date of Activity: 7<sup>th</sup> August 2025
- Place of Activity: Harbour Town





As part of our recreational and cultural experiences, we visited **Victor Harbor**, one of the most scenic coastal towns near Adelaide. The trip offered us a chance to explore beautiful beaches, historic spots, and the natural charm of South Australia.

The visit was refreshing and memorable, giving us time to relax and enjoy the picturesque views while bonding as a group outside of our academic schedule. Experiencing the coastal environment of Victor Harbor also gave us a deeper appreciation of Australia's natural beauty and cultural heritage, making it a highlight of our stay.

Name of Event/Activity: Winery Experience

Date of Activity: 9<sup>th</sup> August 2025
 Place of Activity: Barossa Valley



We also had the opportunity to visit the world-renowned **Barossa Valley**, one of Australia's most famous wine regions. Surrounded by vast vineyards and scenic landscapes, the visit gave us a glimpse into the region's cultural and agricultural significance.

Although primarily known for its wine production, the trip was much more than that—it was a chance to appreciate the natural beauty, learn about the local traditions, and experience the relaxed countryside atmosphere of South Australia. The outing was both refreshing and educational, adding variety to our IEP journey and allowing us to explore a different side of Adelaide beyond the city.

Name of Event/Activity: Beach Experience

• Date of Activity: 11<sup>th</sup> August 2025

• Place of Activity: Henley Beach



Another memorable outing during our stay was our visit to **Henley Beach**, one of Adelaide's most popular coastal destinations. The serene shoreline, lively atmosphere, and refreshing sea breeze made it a perfect spot to relax and enjoy the natural beauty of South Australia.

The visit gave us a break from our academic schedule and allowed us to spend quality time together as a group. Watching the waves, walking along the beach, and soaking in the sunset created lasting memories and added a touch of leisure and calmness to our overall IEP experience.

## Week-4

Dates: (12th August - 19th August)

Name of Event/Activity: Adelaide Zoo
 Date of Activity: 13<sup>th</sup> August 2025

• Place of Activity: Adelaide Zoo





As part of our cultural and recreational experiences, we visited a **zoo** in **Adelaide**, which turned out to be both fun and educational. The visit allowed us to see a wide variety of animals, including some of Australia's unique wildlife such as kangaroos, koalas, and emus.

Exploring the zoo gave us a closer look at the region's biodiversity and conservation efforts. It was an exciting experience where we not only enjoyed observing the animals but also learned about the importance of wildlife protection and environmental awareness. The outing added a unique dimension to our IEP journey, combining leisure with valuable learning outside the classroom.

- Name of Event/Activity: Visiting the Parliament
- Date of Activity: 13<sup>th</sup> August 2025
- Place of Activity: Parliament, South Australia







As part of our cultural and academic exposure, we had the opportunity to visit the **Parliament of South Australia in Adelaide**. During this visit, we were addressed by a **Member of Parliament**, who explained how the legislative process works and gave us insights into the functioning of the parliamentary system in Australia.

This experience provided us with a deeper understanding of the country's governance, decision-making, and democratic values. It was highly informative and broadened our perspective on how political and administrative systems differ across nations. The visit also highlighted the importance of civic awareness, leadership, and active participation in shaping society, making it an enriching addition to our overall IEP journey.

- Name of Event/Activity: Presenting projects
- Date of Activity: 15<sup>th</sup> August 2025
- Place of Activity: Australian Institute of Advanced Technology (AIAT)







Just like our first presentation, we also completed our **second project presentation**, this time working as a **team**. For this, we designed a **Speed and Proximity Detection system** using a **D1 development board** along with sensors.

The project combined concepts of hardware and software, giving us hands-on experience in working with embedded systems and IoT-based applications. It was a collaborative effort that strengthened our teamwork, problem-solving, and technical integration skills. Presenting this project in front of faculty and peers not only showcased our technical learning but also highlighted our ability to work effectively as a group.

- Name of Event/Activity: Garba Night
- Date of Activity: 15<sup>th</sup> August 2025
- Place of Activity: Australian Institute of Advanced Technology (AIAT)



One of the most memorable cultural experiences during our stay was attending a **Garba event in Adelaide**. Being an Indian, this celebration felt especially close to home, as Garba is an integral part of our tradition and identity.

Dancing to the rhythmic beats and vibrant music in a foreign land was both nostalgic and heartwarming. It not only gave us a chance to reconnect with our roots but also allowed us to share a part of our culture with others around us. The lively atmosphere, colorful outfits, and enthusiastic participation made it a joyful evening that reminded us of festivals back in India.

This experience showed how cultural traditions travel across borders and continue to bring communities together, making it a special highlight of the IEP journey.

Name of Event/Activity: Waterfall Gully

Date of Activity: 17<sup>th</sup> August 2025

Place of Activity: Mount Lofty



We also had the opportunity to visit **Mount Lofty**, one of Adelaide's most famous lookout points. The trip offered breathtaking panoramic views of the entire city, the coastline, and the surrounding hills. Standing at the summit gave us a refreshing break from our routine and a chance to enjoy the natural beauty of South Australia.

The visit was both relaxing and inspiring, as it allowed us to appreciate Adelaide from a completely new perspective. Spending time in such a scenic environment helped us connect more closely as a group and created lasting memories as part of our IEP journey.

Name of Event/Activity: Meet at the Henley Beach

Date of Activity: 19<sup>th</sup> August 2025
 Place of Activity: Henley Beach



We also had the opportunity to visit Henley Beach, one of Adelaide's most popular coastal destinations. The trip offered stunning views of the ocean, golden sands, and a lively beachside atmosphere. Walking along the shore and watching the waves was a refreshing change from our daily routine, giving us the chance to enjoy South Australia's natural seaside beauty.

The visit was both relaxing and energizing, as it allowed us to experience Adelaide from a different perspective. Spending time in such a vibrant and scenic environment strengthened our bond as a group and created lasting memories that enriched our IEP journey.

## Week-5

Dates: (20th August – 22nd August)

- Name of Event/Activity: Graduation Day and Souvenir Distribution
- Date of Activity: 20<sup>th</sup> August 2025
- Place of Activity: Australian Institute of Advanced Technologies



We also had the privilege of attending a graduation ceremony at the Australian Institute of Advanced Technologies, marking the successful completion of our courses in Wireless Communication and Machine Learning. During the event, we were awarded certificates of completion and recognition for our internship experience, which was both a proud and memorable moment in our academic journey.

As part of the ceremony, I had the opportunity to present our college souvenir to Mr. Gregory Black, the CEO of the Australian Institute of Advanced Technologies, which made the occasion even more special.

- Name of Event/Activity: Last Trip
- Date of Activity: 21<sup>st</sup> August 2025
- Place of Activity: Australian Institute of Advanced Technologies





We also had the opportunity to visit Glenelg Beach, one of Adelaide's most iconic seaside destinations. The beach offered a perfect blend of golden sands, lively surroundings, and a calm ocean view, giving us a chance to relax and enjoy the coastal charm of South Australia. Walking along the jetty and spending time together by the shore was both refreshing and memorable.

As this was our final trip during the IEP, the visit to Glenelg Beach carried a special significance. It provided a perfect conclusion to our journey, leaving us with lasting memories and a sense of closure to our time in Adelaide.

Name of Event/Activity: Return Day
 Date of Activity: 22<sup>nd</sup> August 2025
 Place of Activity: Adelaide Airport



Our journey concluded with our flight back to Ahmedabad, marking the end of an unforgettable International Experience Program. The return trip was filled with reflections on the knowledge we had gained, the cultural experiences we enjoyed, and the memories we created together in Adelaide.

While leaving South Australia was bittersweet, the flight home symbolized the beginning of a new chapter where we could carry forward the lessons learned and the experiences shared, applying them to our academic and professional growth at my college BVM.

## Certificate





AIAT/IEP/GTU/2025/14

AIAT

AUSTRALIAN
INSTITUTE OF
ADVANCED

THIS IS TO CERTIFY THAT

GOHIL TIRTH DIPESHKUMAR 220070116072

student at Gujarat Technological University (GTU), Ahmedabad, India
participated in the International Experience Program (IEP) at Australian Institute of Advanced
Technologies 21st July 2025 to 21st August 2025.

The student has studied Applied **Machine Learning** and **Wireless Communication** as per the syllabus and teaching scheme of GTU.

He / she has visited the AIAT Campus and completed the Summer Internship Project (SIP).

- eapak

Prof. Deepak Upadhyay IEP 2025 - Mentor



V Murlit

Dr. Murli Viswanathan CAO, AIAT

### **COURSE OUTCOMES**

By the end of the program, I was able to:

- 1. Apply theoretical knowledge to real-world problems by designing projects such as the *Bird Voice Predictor* (Machine Learning) and *Speed & Proximity Detection System* (IoT).
- 2. Demonstrate technical competency in emerging domains like Machine Learning, Wireless Communication, and IoT through hands-on practice and guided mentorship.
- 3. Strengthen critical thinking and research skills by analyzing datasets, implementing algorithms, and presenting results in a structured academic environment.
- 4. Develop cross-cultural communication and collaboration abilities by working with peers in an international setup, sharing ideas, and learning from different perspectives.
- 5. Enhance professional presentation and interpersonal skills through multiple project demonstrations and interactions with international faculty members.
- 6. Gain cultural awareness and adaptability by participating in excursions, cultural events, and social interactions that provided insight into Australia's society, governance, and traditions.
- 7. Build confidence and leadership qualities by engaging in group projects, managing tasks collaboratively, and showcasing teamwork in challenging environments.

#### CONCLUSION

The International Experience Program (IEP) 2025 at the Australian Institute of Advanced Technologies (AIAT), Adelaide, was a truly transformative experience that went far beyond the boundaries of conventional classroom learning. Over the span of five weeks, the program successfully integrated advanced technical coursework with practical exposure, project-based assessments, and cultural immersion, thereby shaping a well-rounded academic journey.

Academically, the program deepened my knowledge of Machine Learning, Mobile Computing, and Wireless Communication through structured sessions, guided mentorship, and hands-on projects. Working on applications such as the *Bird Voice Predictor* and *Speed & Proximity Detection System* not only enhanced my technical expertise but also taught me the importance of innovation, interdisciplinary thinking, and applying theory to real-world challenges. The assessments and presentations tested my problem-solving approach, communication style, and ability to work under academic scrutiny, which in turn built my confidence as a professional.

Equally significant were the cultural and recreational activities, which offered an opportunity to engage with Australia's society, governance, and natural beauty. Visits to places like the Parliament of South Australia, Victor Harbor, Barossa Valley, Henley Beach, and Adelaide Zoo provided a broader perspective on global citizenship and civic values, while events like Garba Night reminded me of the strong connections between cultural identity and global exchange. These experiences not only enriched me personally but also fostered adaptability, teamwork, and respect for cultural diversity.

The program also instilled in me qualities of leadership, resilience, and collaboration. The interactions with international faculty, coordinators, and peers provided a unique platform for cross-cultural communication, mutual respect, and knowledge sharing. It demonstrated the significance of international collaboration in education, research, and innovation.

Overall, the IEP has been a milestone in my academic and professional journey. It bridged classroom knowledge with practical learning, helped me grow as a globally competent engineer, and inspired me to carry forward the lessons of technical excellence, cultural sensitivity, and collaborative spirit into my future endeavors. The memories, skills, and values gained through this program will serve as a strong foundation for my career and lifelong learning.