Completion Report: My CAMPUS Asia Study Abroad Experience

My 5-month study abroad experience at Nanyang Technological University (NTU) in Singapore, facilitated through the CAMPUS Asia Program, was a transformative period that went beyond academic learning. This journey enriched my understanding of diverse cultures, expanded my global perspective, and allowed me to see the intersection of technology, culture, and society from a fresh vantage point. As a math major at Waseda University's School of Fundamental Science and Engineering, this experience was crucial for merging my technical problem-solving skills with a broader social consciousness, aiming to foster innovative solutions to real-world challenges.



Getting into the CAMPUS Asia Program



Applying for the CAMPUS Asia Program was a deliberate decision rooted in my desire to immerse myself in Asia's diverse cultural and academic landscapes. My previous experiences studying in Tokyo and participating in international school activities equipped me with a multicultural perspective and an understanding of global academic standards. However, I longed to take this journey one step forward by putting my old and new perspectives together into action.

NTU was particularly appealing to me because of its strong emphasis on science and engineering, coupled with a robust interdisciplinary curriculum that encourages students to think beyond conventional academic boundaries. The university's strategic location in Singapore, a global hub for innovation and technology, presented an ideal environment for me to explore the practical applications of mathematics in fields such as finance, management, artificial intelligence (AI), and social sciences. I was also keen to learn from NTU's commitment to fostering diversity and inclusion, which aligned with my interest in creating equitable spaces in STEM fields.

The Study Abroad Experience at NTU



From the moment I arrived in Singapore in August 2022, I was struck by the city's dynamic blend of cultures and its progressive approach to urban living. Singapore seamlessly integrates technology into everyday life, from its advanced public transportation systems to its pervasive use of cashless payments. This practical application of technology provided a vivid, real-world example of the concepts I studied in class. Witnessing firsthand how technology can enhance daily life underscored for me the importance of integrating innovation with usability in public policy and urban planning.

At NTU, I enrolled in a diverse range of courses that effectively bridged the gap between theory and practice. Classes like "Fundamentals of Management," "Business Operations," and "Statistical Analysis in Public Affairs" gave me a strong foundation in the economic and administrative aspects of business. These courses were essential in understanding how mathematical models can be applied to optimize decision-making processes across different sectors. In "Mathematical Economics," I developed skills in using mathematical tools to interpret complex data sets, a crucial ability in today's data-driven world. Through these classes, I gained a

deeper understanding of how mathematical principles can be harnessed to address societal challenges, particularly in diverse regions like Asia.



One of the most memorable aspects of my academic experience at NTU was the university's strong emphasis on diversity and inclusion. Coming from Japan, where women in STEM are often underrepresented, I was inspired by NTU's balanced gender representation and its proactive efforts to create an inclusive environment. Seeing women and students from various backgrounds actively participating in STEM courses was both encouraging and enlightening. It reinforced my belief in the power of diverse perspectives to drive innovation and improve problem-solving processes.

Another significant aspect of my academic and personal experience at NTU was the focus on artificial intelligence (AI). Singapore is at the forefront of AI adoption and innovation, having implemented a comprehensive AI strategy to leverage technological advancements in sectors such as healthcare, transportation, and finance. At NTU, I learned about AI applications in various areas, including smart city initiatives, personalized healthcare, and data analytics for decision-making. I was particularly impressed by the widespread use of fintech in Singapore; once I adapted to the local lifestyle, I found that I rarely needed to use cash or cards. However, my exploration of AI in Singapore went beyond its practical applications. I also delved into the ethical considerations surrounding AI use. I discovered that the Singaporean government is proactive in addressing these concerns through initiatives focused on responsible AI development, data protection, and transparency. This experience helped me understand the ongoing efforts to ensure fairness, accountability, and the responsible use of AI in decisionmaking processes. On the NTU campus, there were numerous initiatives aimed at educating students about the importance of privacy and the ethical implications of AI use. This balanced approach to AI—embracing its potential while conscientiously addressing its risks—highlighted for me the critical role of ethical frameworks in guiding technological advancements.

Overall, my study abroad experience at NTU was a powerful blend of academic rigor, cultural immersion, and technological exploration, all of which have profoundly shaped my perspective and future aspirations.

Social Innovation Forum (SIF) 2023

The Social Innovation Forum (SIF) 2023, held in Singapore as part of the CAMPUS Asia Program, was another pivotal event that broadened my understanding of social issues and innovation in an Asian context. Over four days, students from Korea University, NTU, Peking University, and Waseda University gathered to discuss, debate, and develop solutions for pressing social challenges. This forum was more than just an academic exercise; it was a collaborative effort to leverage our diverse backgrounds and academic disciplines to generate impactful solutions for societal issues.



One of the forum's most memorable experiences was our visit to various cultural landmarks in Singapore, such as the Peranakan houses in Katong, Kampong Glam, Haji Lane, Chinatown, and Little India. These visits offered a unique lens through which to view Singapore's multicultural society. The Peranakan houses, with their ornate facades and vibrant colors, symbolize the blending of Chinese, Malay, and Indonesian cultures. Meanwhile, Kampong Glam, with its rich Malay heritage and bustling street life, exemplified the coexistence of tradition and modernity. These experiences deepened my appreciation for how cultural heritage can be preserved while fostering a unified national identity, a lesson that is particularly relevant in increasingly globalized societies.



The discussions and workshops at the forum were equally enriching. We explored topics such as social entrepreneurship, sustainable development, and digital innovation, all through the lens of cultural sensitivity and ethical responsibility. I was particularly struck by a session on leveraging technology and AI for social good, where we examined case studies on how digital platforms and AI tools are being used to address issues like income inequality, healthcare accessibility, and education gaps. This session highlighted the potential for technology and AI to serve as powerful tools for social change, provided they are used thoughtfully and inclusively. The discussions underscored the need for AI systems to be designed with fairness, transparency, and accountability in mind, ensuring that these technologies benefit all segments of society, especially marginalized communities.

Reflections and Future Implications

Participating in the CAMPUS Asia Program and the Social Innovation Forum has had a profound impact on my academic and career aspirations. The experience underscored the importance of combining technical knowledge with a deep understanding of social contexts to create solutions that are not only innovative but also equitable and sustainable. It also highlighted the value of cultural empathy and the ability to navigate diverse environments—skills that are increasingly important in our interconnected world.

Looking ahead, I plan to pursue a master's degree in Business Analytics, with a focus on applying data-driven insights and AI technologies to solve social issues in diverse societies across Asia. The network I developed through the CAMPUS Asia Program, including peers and mentors who share a commitment to social innovation and technology, will be invaluable as I continue on this path. I am excited about the possibility of collaborating with these individuals in the future, leveraging our shared experiences to drive positive change.

Reflecting on my time in Singapore, I am grateful for the opportunity to engage deeply with local communities, explore new cultures, and learn from a diverse group of peers and professors. This experience has reinforced my belief that true innovation requires not just technical expertise but also a strong commitment to inclusivity and cultural understanding. As I move forward, I am eager to apply these lessons to contribute to the advancement of societies in Asia and beyond.