

LIFE IN JAPAN: THE STUDENT PERSPECTIVE

Life in Japan has been phenomenal! Let me take you on a journey of my experience as a student in Nagoya, Japan.

KONNICHIWA FROM NAGOYA!

My name is Florence Gundidza. I am a Principal Business Solutions Officer in the Ministry of Information Communication Technology, Postal and Courier Services. It has been a great honour to be one of the recipients of the prestigious JICA Sustainable Development Goals (SDGs) Global Leader Scholarship in October 2020. I studied Master of Engineering in Computer Science at Nagoya Institute of Technology from April 2021 to March 2023.



ARRIVAL IN JAPAN



I arrived in Japan around mid- October 2020. Some may ask how I managed to travel during the peak of COVID-19? Well, JICA staff made tireless efforts to make sure myself and my other two colleagues travelled comfortably. Everything was just in place for us to travel without any complications. Of course, when I arrived in Japan, I went into quarantine for 2 weeks at JICA HQ Tokyo Center and during those two weeks, I lacked for nothing. It was one of the most peaceful moments of my life. It gave me time to reflect and prepare for my new journey in Nagoya.

It goes without saying that I was nervous at first traveling to a country where I knew no one. It can be scary even to the bravest of us but the moment I arrived in Nagoya, I was pleasantly welcomed by my new JICA family. Their hospitality is unmatched. Contrary to what I thought, the beginning of my new journey was smoother than I expected.



JICA Chubu Centre Family



Osu Kannon Temple

LIFE IN NAGOYA

Commonly referred to as “The Home of Toyota”, the city of Nagoya is at the center of the Nagoya zone which is one of three major economic zones in Japan. It is surrounded by a concentration of industrial zones populated by the manufacturing, automobile, plane, and machinery manufacturing industries. This leads to the development of a thriving commerce and service industry which in turn has added to the convenience of foreign expats living in Nagoya's well-established city.

Nagoya is geographically located in the center of Japan. Due to Nagoya's up-graded transportation infrastructures for land, sea, and air travel, it has become a location from which travel around Japan or abroad is convenient. Not only does it offer a sprawling metropolitan environment, it's also a place to discover Japan's rich history and cultural heritage.

The people in Nagoya have many unique qualities. They are mostly steady going and reluctant to adopt to new things but their love of flowers, and deep-rooted familial love, give locals a sense of solidarity. I can also say they're friendly if you are polite and respect their culture.

GRADUATE STUDENT LIFE AT NAGOYA INSTITUTE OF TECHNOLOGY (NITECH)



Oasis 21 Nagoya

In Japan, it is common that one has to enroll as a “Research Student” first before going for a Master’s Programme. At first, I didn’t quite understand the purpose of being a research student but later I realised it was necessary for me to prepare for my desired specialized field. During this time, I was familiarizing with how research is done to my supervisors’ expectations.

I also took that time as an opportunity to study Japanese Language and Culture. Fortunately, at my university, they offered free Japanese classes. Although, the Japanese language is difficult to grasp (“Nihongo muzukashii”), the tutors were very supportive and patient. Thanks to their efforts and encouragement I can now speak and understand basic Japanese terms and phrases.



Cultural Exchange with Elementary School Students

In April 2021, I started my Master ‘s Programme in Computer Science and Engineering. The programme combines advanced knowledge and techniques from a wide range of fields including intelligence mathematics, science, engineering, information technology, computer science, artificial life, software engineering and system control engineering.

I was fortunate to be part of a research group that focused on diverse research subjects in computer science, where I managed to acquire extensive knowledge that I didn’t possess before I came to Japan. I realised that in Japan teamwork is a big component of success, hence in our laboratory people work as a team in everything. This made my research fun and easier which in turn contributed to its success. I’m also grateful to NiTech staff with special mention to the International Staff for helping me throughout especially on things I didn’t quite understand about the University and Japan in general.



Presenting my research results

MY RESEARCH

Leveraging Contextualized Embedding Transformers for Delay Risk Source Detection

The study developed a delay risk detection framework for Road Construction Projects by analysing unstructured project documents. Project documents contain certain elusive aspects that directly affect or contribute to various Key Performance Indicators (KPIs). Extracting actionable outcomes such as delay sources from management documents (e.g., Project Reports, Minutes of Meetings, Change Orders) to prevent or minimize the impacts is challenging. If modelled properly, these delay sources may inform the project planners and managers of any imminent risks. At present, there are no suitable Artificial Intelligence techniques to benchmark the identification of such in road construction management documents in Zimbabwe.

Extracting semantically crucial information is a challenging task reflected substantially as teams communicate via various project management documents. Realization of various hidden delay sources from these documents without a human interpreter is challenging task due to the highly ambiguous nature of the language used and can in turn be used to provide decision support to optimize a project's goals by project teams.

Following up on the research gap, the study introduced a delay risk source extraction model. The model combined expert knowledge from literature review, natural language processing techniques, and project documents as an unutilized extensive source of information. The framework outputs delay risk sources based on occurrence from previous project reports, significantly reduced expert-induced subjectivism. Ultimately, the study harnessed the power of AI to facilitate a robust and reliable technique for project delay prediction that contributes to the construction project management monitoring and sustainability.

GRADUATION AND ACKNOWLEDGEMENT



Graduation Day

Acknowledgement

I am grateful to the Almighty God for the strength, guidance, and wisdom throughout my academic years and during the research's progress. I'm also eternally grateful and will forever be largely indebted to my research supervisors, Prof. Ozono Tadachika and Ass. Prof. Kikuchi Masato for their continuous support of my Masters' study and help in ensuring that I remained within the scope of my research, as well as for their patience, motivation, and immense knowledge. Without their guidance, my research would not have been the success that it is today. I could not have anticipated having better advisors and mentors for my Masters' study.

Secondly, I'm profoundly grateful for the unwavering support I received from all research members in Ozono Lab for helping me put my ideas well above the level of simplicity and into something concrete. Moreover, I am grateful to my husband, Grant and daughter, Kourtney for their unwavering moral support throughout my studies. I would also like to thank my mother, Gogo Gundidza and family, for supporting me spiritually throughout my studies. Her prayers and encouragement kept me going and gave me strength.

Lastly, I would like to express my sincere gratitude to Japan International Cooperation Agency (JICA) for awarding me an amazing opportunity through their SDGs Global Leader Scholarship. Their support throughout my studies was overboard, and I would recommend anyone to try for this scholarship. You will come out an amazingly different person.

I am grateful to all those who were part of my work and assisted me and I wish them all the best in their lives.