

# Canada-Japan Co-op Program Experiential Report

Azbil Corporation

1-12-2 Kawana, Fujisawa-shi, Kanagawa-ken, Japan 251-8522

[www.Azbil.com](http://www.Azbil.com)

Denny Ng

Mechanical Engineering

University of British Columbia

2013/05/24

Introduction.....	3
Azbil at a Glance .....	4
Company History .....	4
Department Overview.....	4
Occupational Role.....	5
Development of Technological Skills.....	5
Development of Interpersonal Skills.....	6
Academic and Professional Career Development .....	6
Relationship with Coworkers and Superiors .....	7
Living and Working Arrangements .....	8
Living Arrangements .....	8
Daily Commute.....	9
Office Environment.....	9
Typical Day.....	10
Lunchtime at Work .....	10
Experiences in Japan .....	11
Ōyama .....	11
Fuji .....	11
Kochi .....	12
Co-worker’s Wedding.....	13
Tea Ceremony .....	13
Year-end Party.....	14
Year-end Music Party .....	14
New Years in Enoshima .....	14
Kansai .....	15
Enoshima .....	16
Enoden Line .....	17
Hanami .....	17
Bullet Train Ride .....	18
Miscellaneous .....	19
Recommendations to Future Students .....	20
Overall Impression.....	20
Special Thanks .....	21

## Introduction

I had the opportunity to live and work for a year in Japan through the University of British Columbia's Canada Japan Co-op Program. As such, the period of my life between May 31<sup>st</sup>, 2012 and May 26<sup>th</sup>, 2013 was spent living in an experience that I will not soon forget.

I will first introduce Azbil Corporation, the company that sponsored my stay in Japan. This includes a summary of the types of work Azbil specializes in and a brief look at Azbil's history. I will also discuss the department with which I was employed, its role in the company, my role in my team, as well as Japanese workplace culture from the perspective of a Canadian intern.

Finally, with the exception of business trips, one cannot work in Japan without living in Japan. More concisely, there is an entire world beyond employment; private life takes over once work ends. As such, I have dedicated sections of this report to daily life in Japan, living arrangements, and a recollection of my adventures and misadventures.

## Azbil at a Glance

Azbil is a Japan-based research and development company specializing in automation technology. The name Azbil stands for “Automatic Zone Builder,” capturing its philosophy of human-centered automation. Azbil’s corporate portfolio includes: building automation (i.e. energy management and security systems,) advanced automation (i.e. process controllers and sensors) and life automation (i.e. Residential HVAC systems)

## Company History

In 1905, Yamaguchi Takehiro founded Yamatake Shokai Co., Ltd., a trading company for importing and selling American and European machining goods and other instruments. Yamatake Kogyo (industrial enterprise) Co. Ltd. was then founded in 1942, as Yamatake Shokai was established as a separate company. In 1953, Yamatake and US-based Honeywell entered an equity-based alliance at 50% share. In 1963, Yamatake Engineering Co., Ltd. was established. In 2008, Yamatake began renaming its subsidiary companies to Azbil. This marked the beginning of the Group’s unification under a common name. The final step took place in 2012, when the original Japanese branches were also renamed to Azbil. From its modest beginning as a trading company, Azbil has expanded into a global corporation with an extensive portfolio of products and services.

## Department Overview

I was employed under the Department of Core Technological Developments (CTD) in Azbil’s Fujisawa Technological Center. This department is comprised of four groups:

- Sensing
- Actuation
- Control

- BioVigilant

Each group is further divided into teams, which focus on specific projects. In the case of the Actuation and Control groups, each team's efforts contribute to an overarching project. Conversely, the sensing group is unified by the common goal of researching and developing sensing and measurement devices. The BioVigilant group contributes to Azbil BioVigilant, a subsidiary company based in Arizona.

#### Occupational Role

I applied for the steam measurement team under the sensing group, as it was most relevant to my academic specialization in fluid mechanics and thermodynamics. As such, my main roles were to share theoretical knowledge, apply modifications to the LabVIEW data acquisition program, and to assist in data analysis.

#### Development of Technological Skills

Throughout my placement with Azbil, I was given many opportunities to demonstrate my understanding in fluid mechanics, thermodynamics and heat transfer. The project allowed me to gain valuable insight on real-world applications and problems involving steam flows.

Analyzing real steam-flow data has taught me to search for answers beyond purely analytical methods. As many formulae for the dynamic motion of fluids and heat are derived empirically, their accuracies vary immensely. However, this is often overlooked, as formulae return specific numbers. Additionally, due to the difficulty of fair evaluation in exam environments, formula inaccuracies are rarely accounted for in grading. This enforces the impression that formulae provide absolute, correct, and accurate answers. While this is helpful in evaluating proper methodology in academia, it also creates unrealistic expectations of purely theoretical

computations.

Additionally, I gained working knowledge in LabVIEW. LabVIEW is commonly found in engineering applications due to its ease of use. I took the opportunity to refresh my knowledge in programming and delved deeper into the subject matter. As such, I am now capable of writing simple DAQ programs in LabVIEW.

#### Development of Interpersonal Skills

As my coworkers made great efforts to speak to me in English, problems involving language barriers were significantly reduced. However, misinterpretations occurred from time to time and we learned to take extra care to ensure that everyone had reached the same conclusion. Although time-consuming and sometimes stressful for both parties, it reduced repeated work.

The greatest barrier in my attempt to learn Japanese was my willingness to speak the language. While this was due to my shyness and fear of being incorrect, it also made me very inapproachable. Understanding that many people have the same fears was essential to improving my relationship with other people. In many ways, this can be applied to situations beyond language exchange.

#### Academic and Professional Career Development

Living and working in Japan has significantly influenced my future prospects. Prior to my departure to Japan, I had only considered applying for graduate school and starting my career in Vancouver. While a year spent in overseas may be an asset to my post-graduate ventures, it also made me consider the possibility of a career in Japan.

However, finding employment in Japan's technical sector can be a difficult task – especially for those who lack proficiency in the language. This has motivated me to invest extra

effort into my graduate year in hopes of becoming a potential candidate for employers despite language limitations.

In terms of professional development, I was able to experience a new industry in a new office environment. Having worked for a year in a Japanese company, and a year between two Canadian companies, I have developed an understanding concerning some of the similarities and differences in work styles and which aspects suit me best.

#### Relationship with Coworkers and Superiors

At work, my interactions with my coworkers and superiors are very similar to that of what I experienced in Canada. My coworkers and I typically spend lunch break eating and conversing about weekend plans or work. Outside of work, however, I spend much more time with my coworkers compared to when I was in Canada. In many ways, my teammates in Japan have felt much more like family than any other workplace setting.

## Living and Working Arrangements

### Living Arrangements

Azbil generously supplies internship students with lodgings free of charge at the company-owned dormitory located in Yamato. The dormitory is referred to as the Sakuragaoka

Dormitory and is equipped with the following:

- Washing and drying machines on each floor
- Washrooms on each floor
- A cafeteria on the second (ground) floor with:
  - 3 vending machines
    - ◇ 2 with normal beverages
    - ◇ 1 with beer
  - A water and tea dispenser (Hot and cold)
  - A hot plate
  - A microwave
  - A toaster oven
  - A refrigerator (remember to mark your belongings with your name)
- A communal bath on the first (basement) floor with:
  - 3 stand-up shower stalls
  - 8 sitting showerheads
  - An ofuro (sit-in bath)
  - 2 blow-dryers

Breakfast and dinner are provided at the dormitory on workdays for 200 yen and 400 yen

respectively. Both meals include a main dish, two side dishes, and unlimited rice and miso soup. Reservations may be made at latest: the night before for breakfast, and the morning of for dinner. Meal fees are automatically billed from your bank account each month.

#### Daily Commute

For students working in the Fujisawa Technological Center, Yamato is the city directly north of Fujisawa. The total time required between home and work is approximately 45 minutes and is as follows:

- 1) A 15-minute walk from the dormitory to the nearest station
- 2) A 15-minute train ride from Yamato to Fujisawa
- 3) A choice between a 15-minute walk or a company shuttle bus (may involve waiting)

#### Office Environment

The work style felt similar to that of the companies I had worked for in Canada. That is, I am assigned work and I ask for more upon completion. Prior to the company's renaming and unification, Azbil's office environment had western influences due to close ties with Honeywell. However, there were very pronounced differences.

Typical of Japanese companies, the office floor is completely open – the only office on my floor belongs to the chief technical officer. This is a dramatic shift from the privacy of personal offices and cubicles from previous companies. Open offices took me a bit of time to adjust to; having both my team and group leaders sitting within four meters of my seat is a new and unusual experience. For future students, sitting very close to the team leader is guaranteed, as each team shares a pod of desks.

## Typical Day

Each day starts off with a morning team meeting to discuss plans for the day. Use of time does not follow a rigid outline, and usually works around scheduled meetings. At the end of the day, members gather once again to meet with their teams to discuss their accomplishments for the day.

Optional stretch breaks occur at 10:30 am and 3:10 pm, and last for about 3 minutes. In this period, employees may opt to get out of their seats to move around or freshen up. These are especially helpful after an eventful weekend.

## Lunchtime at Work

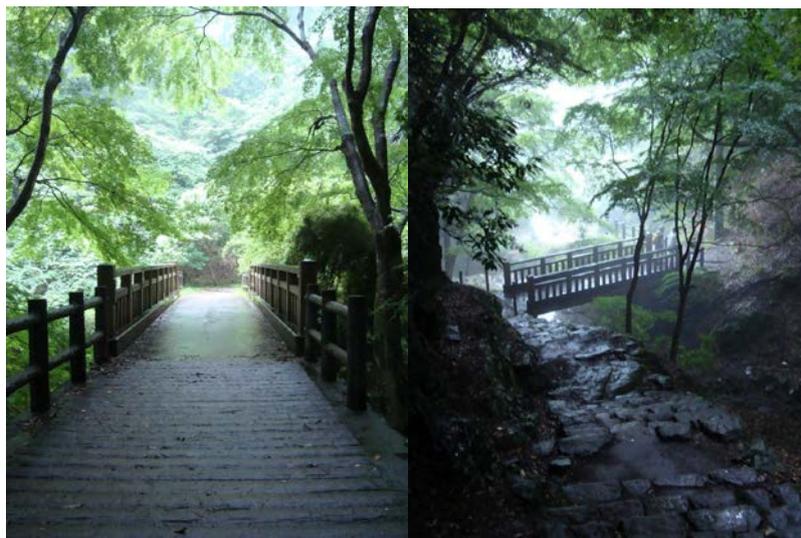
I typically spend lunchtime eating with my teammates, however that is not mandatory as the other interns eat lunch with my team sometimes. It certainly helps to get to acquaint yourself with your coworkers, as they are usually busy with work. There are restaurants near the company, but there is also a three-story cafeteria located on-site. An Edy cash card is mandatory for purchasing meals and will be sold to students on the first day of work. Edy cards are also accepted at major convenience stores and can help reduce the accumulation of coins.

The company cafeteria serves different types of food on each floor. The first floor sells set meals, while the second and third floors sell items separately. The third floor is consistent in the main dishes: soba, udon, ramen, curry rice, and donburi, whereas the second floor changes on a daily basis. There is also a company convenience store located on the first floor, which sells food and daily-use items. Edy cards are the only acceptable form of payment for dining halls, the convenience store will accept cash, but Edy is the preferred mode of payment.

## Experiences in Japan

### Ōyama

As preparation for Mt. Fuji, another student and I decided we would hike Ōyama – a mountain that he saw from his room on the fifth floor of the dormitory. Our expectation was a simple hike, nothing more. As we later found out, Ōyama is actually a very popular location. Our first indication was a street lined with restaurants, specialty shops, spas, and gift stores. On our way to one of the peaks, we saw many historic artefacts, and spiritual locations – a definite bonus to an already scenic hike. There are also vantage points that promise views of Fuji, but we went on a somewhat foggy and rainy day.



Bridge found on the “Woman’s Trail” in Ōyama

### Fuji

Climbing Fuji is an incredibly popular activity with 30% of all climbers being foreigners. This is one of those activities that foreigners do, possibly regret if conditions are anything short of optimal, and beam with pride as they tell their friends and family that they have indeed climbed the tallest mountain in Japan. In my case, a clear, beautiful evening at the base of the mountain did not

necessarily mean a clear, beautiful night near or on the summit. Needless to say, Mt. Fuji is one of those experiences in life that I will remember with a smile as I say, “Once in a lifetime is more than enough. I can’t really remember sunrise from the summit of Fuji as my own memories are a bit cloudy.”



**Climbing Fuji, the weather was nice for the first part of the ascent.**

## Kochi

My trip to Kochi was an incredibly memorable experience. For 4 days during Obon week (summer vacation in mid-august,) I was given the chance to live as a Japanese university student – without having to attend classes. It was an incredible week of sightseeing, wandering and idling about in the blistering summer heat.

Kochi is located on the island of Shikoku. This island is home to Japan’s famous 88 temples. These are the destinations of a pilgrimage traditionally carried out on foot over an estimated span of 5 to 7 weeks. I only had time to visit one of these temples due to time constraints, but they are definitely an inspiring sight. I highly recommend seeing at least one of these temples.



Kochi Castle, one of twelve remaining "original" castles.

### Co-worker's Wedding

To my shock and unbelievable fortune, I was invited to attend my co-worker's wedding. To further add to such a privilege, I was also asked to assist to perform on stage. Nervousness seems to be an all-consuming emotion, and it was ever persisting as my co-worker and I spent weeks exercising and practicing to deliver our performance. The wedding took place on a cruise that departs from Minato Mirai, an extremely scenic part of Yokohama.



The view of Minato Mirai from the cruise terminal.

### Tea Ceremony

My first experience of performing a traditional Japanese Tea Ceremony happened at the start of May in 2012. One can easily argue that half a year is more than enough time for the mind to forget about the feeling (or lack thereof) of sitting in seiza for prolonged periods of time. That is, the

experience and fond memories of Japanese Tea Ceremonies far outweigh the numbness induced by improper form when kneeling.

#### Year-end Party

At the end of each year, it is customary to hold a party to forget everything that has happened. This could either mean going to a nomikai (dinner involving all-you-can-drink alcoholic beverages) or an elaborate dinner. Fortunately for me, it wasn't a night that I would actually forget from excessive alcohol consumption.

#### Year-end Music Party

This was the result of playing at my co-worker's wedding ceremony and a conversation with my department head about plans for the winter break. I figured it was best to not question or think too deeply about the fact that I was theoretically forgetting about 2012 twice, but being able to participate in an event like this would have never occurred to me a possibility!

#### New Years in Enoshima

For me, visiting shrines during New Years was almost an absolute must. Praying at shrines felt more refreshing compared to usual, possibly because of the hopes that usually come with the dawning of another year. Enoshima, being one of my favourite locations in Japan, took on an almost surreal appearance with decorative lanterns illuminating the main shrine.



**The first flight of stairs to Enoshima Shrine during New Years. The lanterns are really flattering.**

## Kansai

Kansai is one of Japan's "must see" locations. I spent a long weekend in picturesque parks and temples commonly seen in travel magazines. Kyoto is known for traditional attractions, Osaka is great for partying at night and shopping, and Kobe has great beef.

Our trip started in Kyoto, where we went to Kiyomizu-dera – a temple at the top of a winding marketplace road. Our next destination was Kinkaku-ji, the famed golden temple. Finally, Fushimi Inari Taisha, known for the abundance of red gates.

Our time in Osaka involved – visiting Shinsaibashi, a hip and upbeat location for young people to party late into the night; riding the Ferris wheel at the HEP FIVE center for a fantastic view of Osaka; and Osaka Castle. As the castle is rebuilt, this is more of a museum shaped like Osaka castle.



Right: A shrine found near Kiyomizudera. Left: Osaka's HEP FIVE center at night.

## Enoshima

Enoshima is a weekend and holiday destination even for locals. This island is connected to the southern coast of Fujisawa, and is accessible by foot. This is by far one of my favourite places in Japan. On certain days, you can catch photos of impressive waves breaking on a rocky shore with Mount Fuji under a cloudy sky. Also, this is an excellent place to have dinner on a relaxing evening – especially for Azbil students who work in Fujisawa! Finally, Enoshima is home to a shrine at the top of 4 flights of stairs situated at the end of a narrow road lined with shops. There's a trend here with long stretches of shops immediately before any tourist destination. Enoshima is particularly quiet on weekdays, making walk up to the shrine feel like a scene from a movie.



Enoshima just after sunset, this is by far one of my favorite places in Japan.

## Enoden Line

The Enoden line runs from Fujisawa to Kamakura, and passes by Enoshima on the way. This train line is an instant ticket to the past with an old-styled interior, scenic ocean view for certain portions of the trip, stations made mainly of wood, and a course through dense housing.



A ticket for the Enoden line is a ticket to the past.

## Hanami

Iconic images of Japan often depict Mount Fuji overlooking the ocean with cherry blossoms blooming in the foreground. This flower is highly celebrated in Japan, and there are events dedicated to the appreciation of its beauty. Hanami is a famous activity where people gather to enjoy alcohol with friends or coworkers under a canopy of pink petals.

Foregoing the consumption of alcohol, I went with a co-worker to Kamakura after work to witness an image so commonly associated with Japan. Avoiding the main road down the center of

Kamakura affords full appreciation of cherry blossoms away from the crowds of people.

Another noteworthy viewing location applies mainly to students working at Azbil. There is a river that runs all the way to Enoshima located just west of the dormitory. Both sides of this river are lined with cherry blossom trees, offering a great view for very little travel time and effort.



Japanese cherry blossoms, significantly different from the ones I see near my house in Canada.

#### Bullet Train Ride

Ever been on a plane flying on the ground? No? Well neither have I. But I would guess that a ride on a bullet train comes pretty close! It's a fascinating piece of technology that gets you from Osaka to Tokyo in about 3 hours. Due to their high speed, you can feel the trains lean towards each other as they pass on the tracks!



Tickets for the various transit systems used in Kansai.

## Miscellaneous

Search and you will find. Since most of Japan's population is gathered around Kansai and Kanto, there will definitely be something for everyone. There are many things to do beyond sight-seeing, and a bit of searching will reveal a world where you can immerse yourself entirely in your hobbies while meeting new people. This includes club activities, conventions, parties, sporting events, everything.

Also, if you have a bit of money and have been thinking of taking up photography, there are plenty of places to go and many beautiful scenes to capture. People here have a very strong sense of aesthetics, and their efforts are just waiting to be captured on film. Additionally, photo walks are great ways to practice your Japanese as you take photos with your friends or coworkers. It's also helpful for discovering some of the most beautiful parts of Japan, as they will often take you to their favourite locations for photography.

## Recommendations to Future Students

To students currently in Japan and those planning on traveling to Japan for work, the best advice I can offer is to keep an open mind, stay optimistic, and be sincere. This is applicable to every setting in life, but I believe this is especially important in new environments. The quality of your experience in Japan extends far beyond the places you've seen or things you've done; travelling to new places to indulge the senses offers a very surface-level experience. The most enriching part of being abroad is meeting new people and making lifelong friends – this, I believe is the true way to experience a new culture. Their perspective may differ significantly from yours. Understanding what the differences are and why they exist will offer new insight; things already in your life may look different under a new light.

For work, this refers to the difference in work style, office layout and the relationship between different levels of hierarchy within a company. These differences may take time to adjust to, and are key to understanding where you are in an organization and how to function as an integrated part.

## Overall Impression

When I left Canada, I didn't know what to expect or what would happen over the course of a year. And looking back, I have no doubt that international exchange was a good decision. I believe the most fulfilling part of being in Japan was meeting and learning from people who I now consider irreplaceable parts of my life. Strangers, acquaintances, and friends alike, the kindness of people is astounding. Immersion in such an environment triggered profound changes in my attitude towards the world, and I am extremely thankful for it.

## Special Thanks

I would like to thank Jenny and Yuko from the Canada Japan Co-op Program for making this entire journey possible. I have made a lot of self-realizations that would have never been had I not stepped away from what I was accustomed to at home in Canada.

I would also like to extend my thanks to my coworkers and caretakers in Japan. Life for the past year would not have gone nearly as smoothly as it did without your advice and guidance in and out of work. The memories of my experiences in Japan will definitely last a lifetime.