As part of my 4 years of University’s studies in Smart City Management, it is mandatory for students to complete at least 10 weeks of internship to be eligible for graduation. It enables the attainment of practical industry experience in my field of study and adaptment to the business environment. It helps undergraduate to learn principles of working ethics as well as significance of communication skills in corporate environment.

Solace is a licensed advanced event brokers that offers a centralized service for companies to manage their infrastructure and deployment through public and private cloud securely and reliably. The company headquarter is located in Canada, while its south-east Asia branch is located in Singapore, Telok Ayer.

Solace is proud to be the only advanced event broker technology that supports pub/sub, queuing, request/reply, streaming and replay, and that’s available as run-anywhere software, purpose-built hardware and a managed service. Clients can control it all through a single pane of glass and deploy it anywhere—public cloud, private cloud, no cloud.

During my internship period I was assigned to the pre-sales team at Solace Systems in Singapore. The pre-sales team is responsible to provide business use cases and bring business values to our big clients, predominantly the architects from different industries. Specifically, this includes the ability to act as a consultant and use Solace technology to integrate seamlessly into their current systems. It ranges from the integration of AWS with solace to private database storage servers. Each individual in Pre-Sales team has to be a technical architect and problem-solver for their clients to use Solace’s technology. However, as an intern, my foremost area lies in creating a new centralized prototyping framework for pre-sales team to ensure the Solace’s technology potential is fully-realized, thus bring more values to our clients. The core idea is allowing a central entity to fully manage and control all brokers that transform how an organization with different departments can work together, instead of departments working in silos to manage their data communication.

The intern in Solace has only one singular goal: to develop and bring the prototype framework to its fruition. This includes the following responsibilities:

* Gathering requirements from client
* Learning capabilities of Solace technologies
* Framework development
* Documentation

The internship provided the opportunity to learn new technology and how it will apply to transform data communication in the business world. In my time with Solace, my interaction and exposure with the clients show the needs of their technology and how I can better cater to them as a company.

My first duty was gathering of requirement. To fulfil this requirement, we have to get around to understand the technology and how it is being used to give value propositions to businesses. We are given the opportunity to seek for advice around the office and ask the most important questions within our prerequisites for the project. From their experience, we are able to sense their pain points in order to move on with our development of the project.

On the other hand, we have to start embarking on the usage of Solace technology. Instead of traditional technology with API that requires every API call for each request, Solace attempts to revolutionize the communication of data through the basis of Publish and Subscribing in message channels. It helps clients to adopt choreography approach in architecture to be more organized, systematic, efficient and transparent.

Publish Subscribe is a messaging pattern where senders of messages, called publishers, do not program the messages to be sent directly to specific receivers, called subscribers, but instead categorize published messages into classes without knowledge of which subscribers, if any, there may be. Similarly, subscribers can express interest in one or more classes and only receive messages that are of interest, without knowledge of which publishers, if any, there are.

In other word the publisher and the subscriber will never know about the existence of one another. Instead, a central broker is created to facilitate the transmission of message. The publisher will send the message to the message broker and the message broker will filtering and broadcasting the message to the right subscriber.

Throughout the development process was the path to self-discovery. I have picked up new programming framework such as functional programming to enhance my code readability and scalability for the project. Functional programming is a programming paradigm, meaning that it is a way of thinking about software construction based on some fundamental, defining principles. (OOP, procedural programming etc.) Functional code tends to be more concise, more predictable, and easier to test than imperative or object-oriented code. I would think some of the best things I have learn in my internship journey is the rewritting of my codes to functional programming. It often challenges my core concepts of programming and how I can better apply in projects.

Another major challenge I faced was a new Lifestyle. It made me woke up early in the morning with the alarm clock at 7.30 am, latest by 8.30 am to get ready for work. I sat for 7 to 8 good hours in a day typing and developing either projects or doing an online research about programming and architectural structure. The new life was quite jarring but productive. The hours and the new living situation clearly made socializing more difficult than before. This challenge later became normal and part of the intern’s daily life activities as the days moved on.

It also encountered financial difficulties including food and transportation. Financial problems and challenges happen to everyone at some point, and the stress and worry can get to anyone. However, realizing that there is an important task ahead to complete kept the intern going. It is not easy to overcome it but with perseverance, determination and dedication, the task ahead was achieved.

Developing the projects with no prior technological experience and assistance, I was assigned to tackle the framework and the projects with another intern in its entirety. This was a major task for us as we had no prior experience. For the beginning, I found myself wanting but as time went on, I gained practical experience on the job. All these challenges have helped me to gain valuable work experience and real-life exposure. It also allowed me to harness the skill, knowledge and theoretical practice been taught in the university.

The program was exclusively of boundless achievement to the intern. The internship program aided the intern to have an in-depth knowledge about the practical problem solving in the corporate world. The intern has been enlightened on the application of theories in real life situations. Solace Systems has offered me opportunities to learn and develop myself in many areas. This internship has prepared me to be ready to serve the needs of industry and commerce more effectively upon graduation. This included providing real life experience and exposure, thus gaining first-hand exposure of working in the real world, granting the opportunity to learn more about my self-potentials and abilities, getting connected and developing professional network. I gained a lot of experience, especially in the development of new centralized framework project. Before the placement took place, my ideas did not match the experiences I have gained during my internship. This internship was definitely an introduction to the actual work field for me. I have learned to work in a technology organization and apply my knowledge into practice. Deepest gratitude I give to the Pre-Sales Team of Solace, most especially Mr. Phil Scanlon and all the staff of the company for the great opportunity given to me for their careful and exquisite guidance which were extremely valuable for my study both theoretically and practically. I perceive this opportunity as a big breakthrough in my career development.