

Application for U.S. based Allstate placement opportunity

- by Maria Thomas.

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Location: Northland. **College:** Letterkenny Institute of Technology (LYIT).

Greatest achievement in Allstate thus far:

Designing and coding my own app through paired programming with another intern from the very beginning through to M.V.P. and beyond.

Introduction:

Welcome! I coded a website for this submission to further demonstrate why you should choose me for this role. I have now been working in CompoZed Northland for 8 weeks. The opportunity to work here during the summer while many of my classmates are taking a break from their studies has been invaluable to me. I am immensely grateful to Allstate for offering such a great learning platform to dedicated students such as myself.

I have always had a very logical mind, initially this directed me to Science. After finishing Secondary school, I went on to study Bioscience at LYIT and received good grades. I realised after some time that this was not quite the path I was looking for. However, I believe this sort of technical based environment was still valuable to my learning today. At the time, the thought of going into programming had never occurred to me, after all; it's not something we are told about in school. On the other hand, I had always admired my uncle who had completed several degrees and courses in Computing and worked in many IT related roles for multiple companies. Whenever anyone in my family had an IT related problem they would go him. To me, it seemed like he had an endless wealth of knowledge in this area. I loved learning about technology from him and had always picked up Computing tips and tricks quickly while others in the family struggled.

This was one of the things that encouraged me to apply for the course I am currently studying. Starting this course was a revelation to me. Science wasn't where my interest lay but Computing was a whole new ballgame. I really loved all my classes and I was so eager to learn that I would study for hours and it wouldn't even seem like work because I was genuinely interested in what I was doing. I now know from personal experience what a major difference this makes and this is one of the attributes I would bring with me should you choose me for one of these positions.

Having never been to the United States, the idea of being able to work for Allstate again; not only in a role I love but in a new cultural environment really appeals to me. I want to gain as much knowledge as I can and I have no doubt that I would be able to learn even more about programming in general abroad. This is also why I am currently considering spending a portion of my third year in college studying in Vienna, Austria.

Achievements:

CompEdu M.V.P. launch:

CompEdu is a product that fellow intern Dylan Rafferty and I have been paired to and working on for the past few weeks. CompoZed Northland currently has a products board which contains product information such as name, team members, technologies used, testing stack etc. for each product in the lab. This board was very rarely updated and this combined with the inconsistent written format made it difficult to use. We were tasked with digitising this board.

We discovered that developers tried to use this board to find out who had experience with a certain technology they were unfamiliar with and needed help with. However, the fact that the board was out of date meant they lost time asking several people before coming to someone who could help them. We provided a solution to this problem which will bring a lot of value to the company. I have been heavily involved in this product from the very beginning. We chose to code this product in React because of the testing capabilities and the UI libraries it offers. Neither of us had any experience using React but despite this I took it from the early scoping and inception stages right through to Minimum Viable Product (M.V.P.).

We will be further expanding on it post M.V.P. by adding additional features. We used a MSSQL database to store our data and an interesting point about ReactJS is that while it can access databases from the client side, it's not easily done and creates security issues. To circumvent this, we decided to split our app into two separate applications; a server side and client side. The server side is an Express application which serves the client side React app using Ajax calls. API to handle the calls between them. This was an excellent learning experience. We officially launched this product for use in the Belfast and Northland labs on Friday 25th of August and this was something I was extremely looking forward to. I presented the Minimum Viable Product (M.V.P) to the lab, received feedback on it and answered questions. The product will also be added to the CompoZed docs and the CompoZed Allstate website in the coming weeks.

This has been the highlight of my Allstate placement so far. Being able to say that I have created this product from scratch and the lab will now use it to aid my colleagues is a major personal achievement for me.

Link to product staged in Pivotal Cloud Foundry: <https://comp-edu.apps.nonprod-mpn.ro11.allstate.com/>

Link to CompEdu Github repository: <https://github.allstate.com/Belfast-Labs/CompEdu>

Highest G.P.A:

I received a letter from the Head of the LYIT Computing department congratulating me on earning the highest G.P.A. across my class year group for the first semester of my course. (Second semester highest G.P.A. has not yet been released).

Achievements:

Highest mark in Computer Architecture:

I was informed by my lecturer that I received the highest mark in the entire year for Computer Architecture in the second semester. He complimented me on this as this is a difficult thing to achieve considering we had to submit practical lab reports and quizzes weekly and end of semester exams for this subject making the workload very high. The material is also hard for most students to get their heads around.

Top scorer in Bursary interviews:

Last year I was interviewed for a bursary scheme to encourage more females to get into computing. This scheme was supported by Allstate and several other companies. One of the interviewers on the day was CompoZed Global Lab Director - Gina O'Leary. Not only was I accepted for this bursary but Gina recently informed me that I was the top scorer in the interviews.

Javascript and ReactJS learnings:

I have completed 2 courses on Codecademy since starting in Allstate. One of these was a Javascript course and the other was in ReactJS. I have also made use of the Pluralsight tutorials and written the CompEdu product using React.

Testimonials:

Quotes and testimonials on my abilities:

"Maria has grown since she joined the Northland CompoZed lab. Her verbal and communication skills have improved as she regularly contributes in daily standup, IPM and retrospective sessions. She questions and is eager to learn. Maria has embraced the CompoZed culture - learning the XP methodology and is involved in daily pairing. Maria has taken a problem from Ideation into Scoping, validated the assumptions by leading Discovery and Framing sessions, synthesized data and brought findings to Inception to support the formation of an MVP. As part of a team she worked to learn ReactJS and delivered daily stories as part of product development. Maria continuously learned throughout this journey and has a very positive attitude. The culmination of the work to deliver an MVP and launch a product is a testament to Maria's skills and how she has evolved and iterated in her own development during her time in our lab. In my opinion Maria would be an asset to any team and I would highly recommend her."

- Emma McLaughlin, Product Manager at Allstate Northland.

"I have been working as Maria's mentor during her time in CompoZed labs. Maria has turned out to be a great addition to the team. Maria's role within the team has required her to learn a number of new technologies over a short space of time and I have found that she has been a quick learner and has adapted to her role with ease. Maria is a talented hard-working individual who will continue to grow as she becomes more experienced in her career and I would gladly recommend her as she has been a great asset to the team."

- Ciaran Concannon, Internship Mentor and Developer at Allstate Northland.

Testimonials:

"I paired with Maria on some concepts completely new to her and was very impressed by her speed of understanding. Maria very quickly reached a level where she made genuine contribution. However, it was Maria's enthusiasm and confidence combined with a maturity to collaborate that will guarantee her success in future endeavours."

- David Stewart, Developer at Allstate Northland.

You were our top scorer, you were very good."

- Gina O' Leary, CompoZed Global Lab Director, referring to my bursary interview.

"Even at this early stage, I can see you have the right mind for programming and I don't give out compliments easily."

- Gary Cullen, Programming lecturer at LYIT, Year 1, Week 3.

"You will have no problem with this. You're top of the class and one of the star pupils in the year. You always pay attention, you know the material well and you have the drive to achieve. I know you'll go far."

- Michael McCann, Operating Systems lecturer at LYIT

(after I had asked him a question about an upcoming continuous assessment exam).

Recommendation:

"After Maria joined the CompoZed lab in Northland she worked on several different teams. Maria proved to be proficient at picking up the languages, technologies & libraries used by each team.

While on the "SMCE Manage My Staff" product, Maria rotated pairs and paired very well with everyone. Maria quickly picked up the high-level concepts and asked appropriate questions while pairing, which delivered the best solution for our customers. Maria adopted the XP values & work practices while demonstrating an understanding of the underlying Agile principles.

Some of the main technologies, libraries and frameworks used included:

- Node.js (Server-side JavaScript runtime)
- Expressjs (web application framework)
- JavaScript (server and client-side)
- git & github
- CloudBees Jenkins for CI (Continuous Integration) & CD (Continuous Deployment)
- Pivotal Cloud Foundry (PAAS - Platform As A Service)
- mocha, chai, supertest, codeceptjs for testing
- ReactJS, SQL (MSSQL), Bootstrap, JQuery, CSS, Enzyme (For react testing)

Maria has a natural curiosity that is a requirement for every successful technologist. Maria worked well both as part of a team & individually.

Testimonials:

Recommendation:

Maria & another intern worked on a new product called CompEdu. They went through the complete lifecycle from Ideation, through Discovery & Framing, Scoping, Inception, Execution and Release as a pair of XP Full Stack Software Engineers & delivered MVP in under 5 weeks. This is a huge achievement for any product team - considering this was done by a pair of 1st year interns makes the accomplishment even greater.

I believe Maria would be a valuable asset to whatever company manages to hire her. I would welcome the opportunity to work with Maria in the future."

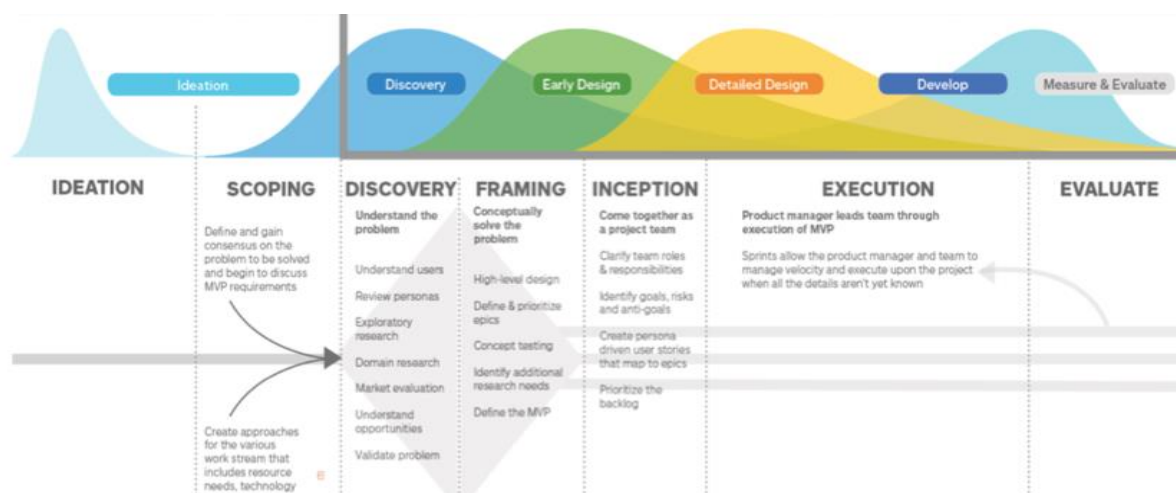
- Diarmaid McGowan, Senior Full Stack Software Engineer @CompoZedLabs

My Time at Allstate:

My time at Allstate has given me some of the most enjoyable experiences in my life. The thing I love most about the job is how collaborative the atmosphere in the lab is. Someone is always on hand to help if you need them and they never make it seem like a chore.

I also really love the learning culture the company encourages with all the Learn Days, Lunch & Learns and talks frequently available, not to mention the additional resources available for people who want to expand their knowledge eg. Pluralsight courses. It really impresses me that so much emphasis is put on continuous improvement.

As you can see from the way I have turned this submission into a chance to further improve my HTML and CSS skills and learn how to use Github with Windows (since we operate on MACs in CompoZed) continuous improvement is something I also strive for. Due to the time constraints, I was again able to see the benefits of using Agile methodology to develop this project. I used the concept of first getting the basic functionality and content up and running and then adding extra features.



During my time with Allstate I have been involved in the product life cycle from start to finish through the development of CompEdu. This product is something which really demonstrates my abilities and it is great to have something tangible to present in the future to illustrate my learnings.

Why should you pick me?

We Value Each Other / We win together:

I have been engaged in paired programming with the other CompoZed intern; Dylan Rafferty and this has been useful as I was able to share my knowledge of HTML and CSS with him and he shared his knowledge of databases with me. In general, everyone in the lab has been extremely helpful whenever I have questioned them about something, which I try to make a habit of to take advantage of the highly skilled developers around me.

We Value Freedom of Action / We're here to serve:

We are given the freedom in CompoZed to pick our preferred technology to code our products. This is important to me as it gives me the ability to choose a technology I'm unfamiliar with and research how to implement it which furthers my learning. I have also found the paired programming environment very beneficial. This method of programming really encourages sharing of knowledge between partners. Some additional projects I have taken on are; learning to code in Python in my spare time and volunteering to teach primary school children programming for a day at my college last year which was really satisfying.

We Value Agility with Purpose / We're transparent:

I have really embraced the agile principles and the ideas behind Extreme Programming. I have been greatly successful in working on multiple stories (tasks) related to our product which were broken down into more manageable pieces to maximise productivity and increase transparency. In addition, I have gained experience in Test Driven Development which CompoZed uses to write better code by encouraging the developers to think more about what they're doing before they get started.

We Value Being Change Catalysts / We get continuously better:

I often make a point of asking questions. I find that curiosity and an inquisitive nature are some of the best traits to have in this industry. I frequently contribute at our morning standup meetings and retros to get my points across. I would also like to mention that while learning the new technologies I have been exposed to here at Allstate, I have been using my free time to continue coding in Java to keep this knowledge fresh for when I go back to college.

We Value Leaving Things Better Than We Found Them / We drive results:

CompEdu will be launched on Friday September 25th. This product will be available after I leave the lab and will be really helpful to the people currently working in the lab. I have 3 weeks of this internship remaining and given that we have completed our M.V.P., we will start adding additional features to the product next week. Still working on Java on Codewars to keep it fresh over the summer.

Evaluation of this submission project:

Although it was brilliant to be allowed to apply for this placement having missed the original deadline, I feel like I would have benefited immensely from the extra time. It was difficult to manage putting together this application and preparing and preparing to launch our M.V.P. (Minimum Viable Product) in a short time period. However, this was a worthwhile project.

Things I would improve next time:

Under more flexible time constraints I would have used the Bootstrap framework to implement a grid system and make the styling of this website more efficient. I am more familiar with CSS but I would have enjoyed learning more about how to implement Bootstrap styles. Initially I experimented with using the modern flex box system to style the pages but this wasn't a viable option because of the positioning of some of the page components.

I would love to have been able to add additional styling such as fun pictures or creative diagrams to make this site less text based. I think it would have been really interesting to use Sass scripting language as it is more object oriented which would appeal to me considering my background of studying Java in college. This is something I will most likely work on when I have some free time to enhance my own development.