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Baden-Württemberg-Stipendium

Experiences of Sruthi Sahebjada as an Exchange Research Student



Home University: RMIT University, Melbourne Australia

Host University: Baden-Wuerttemberg Cooperative State University Stuttgart (DHBW Stuttgart), Germany My journey as an Exchange student coming from Australia to Stuttgart has involved umpteen twists, turns, adventures, lessons learnt and friends made. As the end of my tenure here dawns, this is a brief report on my experiences during my visit here and the unforgettable memories I carry home with me. I have recently graduated from the RMIT University, Melbourne, Australia with the Bachelors in Electronics and Communication Engineering. Owing to my scores, the University has granted me exemption from having to do Masters and gave me a direct admission to the **Doctor of Philosophy in Electronics and Communication Engineering**. My major field of interest is Biomedical Engineering and the research topic, as a part of my Doctoral that brings me all the way here from the Land Down Under is related to this field. Along with another student named Jay O'Connor, I have been chosen to be a part of this exchange program as our final year Bachelors major projects target the same area of studying Electromyographic signals. Back home, having worked on the software to analyse these signals, our projects inspired our supervisor Professor Dinesh Kant Kumar to interact with the supervisor from Duale-Hochshule Baden Wurttemberg Professor Hans Weghorn and there by leading to a joint venture of combining our knowledge gained in Australia to be put into practice onto robotic control systems available in Germany. The end result is that a real-time wheel chair control system using the Surface Electromyographic Signals as obtained from a hand has been successfully implemented and tested to work with an accuracy of nearly 99%. In addition, a full paper submitted reporting the work done here has been accepted by an international conference being held by a non-profit organisation, International Association for Development of the Information Society at Berlin during March 2012.

When I was first told that I had the opportunity to participate in this program and asked what my opinion was – I was more than excited to even speak. My answer was a definite yes! Of the innumerable reasons, the obvious fact that global players like Mercedes-Benz, Porsche, Bosch, etc. have helped to create a matchless reputation of the automotive city of Stuttgart. It is well-known that **Research and development** in Stuttgart have an excellent standing throughout the world which is especially advantageous in the field of robotics. An initial browse through my potential Department and supervisor at DHBW through the internet also helped me decide that it would be an excellent chance to grow and learn beyond the horizon. Furthermore, Baden-Wuerttemberg Cooperative State University Stuttgart (DHBW Stuttgart) had hosted a lot of RMIT students prior to me, and I felt a certain sense of relief to know that they were accustomed to receiving Aussies struggling to speak German and those new to the European lifestyle. I thought that there would be a support network. I was also attracted by the location. Having never been to any place in Europe, I was keen to explore the German style of living and the proximity to other beautiful countries was also an enormous draw-card.

The essential arrivals procedures such as applying for the **German Visum** and **travel insurance** were a smooth ride for me, being an Australian Permanent Resident. Although none of it would have been necessary if I were an Australian Citizen, these procedures did not worry me much and it indeed took me by surprise when I received my passport with the Visa stamping merely 2 working days after application. I was glad that despite being a Research student Visa to Germany, it allowed me to travel to other EU countries without having to go through the hassle of applying for the Schengen Visa.

After a long tiring flight of about 30 hours, all the way, via Qatar I was pleased to see the **International Students Officer of DHBW**, Ms. Kucia Agnieszka Halina who had come to receive me from the Airport. It is worth mentioning at this point, that words fail to express exactly how

helpful, warm and welcoming the International student's team or the Auslandsamt Office der DHBW has been to me and let me feel at home. Particularly, I thank Ms. Agnieszka, Ms. Doris Kupferschmidt and Ms. Dorte Suchting for all their guidance and tips. I have been in regular email rapport with Ms. Agnieszka for nearly 6months prior to my arrival in Stuttgart and she was patient enough to answer all my queries regarding the finances, accommodation and even the tiny details such as weather and clothing. Meeting her personally just made our friendship stronger and all the anxiety that I underwent during my flight journey regarding my stay at a foreign place had subsided the moment I struck my eyes with her. Starting from there, her friendship and guidance have not ceased till date. These three women have made me feel confident, comfortable and kept inspiring me to work as well as travel in order to make the most of my short trip. It meant a lot to me and my family overseas that I have been taking under their wings and that they are always approachable at any hour of the day if need be.



A candid click of me with the International Students Officers of DHBW

Stuttgart is the capital of the federal state of Baden-Württemberg surrounded by vineyards and forests with numerous parks and islands of greenery offering respite right in the city centre. The area is one of Germany's most innovative and commercially successful regions. In cultural aspects Germany's internationally renowned ballet and opera, many small and large theatres and two well-known musical theatres invite visitors to a wide variety of programs. Predominantly an industrial city, Stuttgart houses the headquarters of top-notch companies like Mercedes-Benz, Porsche, Bosch, Daimler AG, etc. in addition to several other tourist attractions like the world's first Television tower standing 483 metres above sea level, many lakes, gardens and museums.

Due to time restraints, I could not learn **German language** prior to my arrival. I was told that it was not necessary since English is also a widely spoken language- this has, however, been proven wrong with my personal experiences. Although it is true to a limited extent that Graduates and foreigners living in Stuttgart can understand the language, it was rather a difficult task to communicate with the residents, sales persons and the elderly. It took me a little while to get adjusted to it but luckily, it didn't really stop me from having fun, travelling or making friends. Swabisch is a language unto its own. The dialects change and get very provincial at various parts of the country. In due course, I realised that aside from just making life here easier, learning the language makes life so much more interesting and empowering. I put some effort into learning

German in a bid to make friends and be able to express myself better. Compared to other languages, its similarities to English make learning it relatively easy especially learning while living here. I couldn't progress better than the basic small talk I can hold with the locals here, which I still consider for myself as an achievement. I had to be cautious before striking a conversation with a local though, as not all Germans may be open for friendship. For instance, asking "wie geht es Ihnen "without knowing someone just isn't done. Something I learnt out of experience. At the University, interacting with the Supervisor or other technicians was not a problem as they spoke fluent English.

I noticed that the **locals** are a good sort of people underneath it all but many are reserved to the point of seeming unfriendly. It's a cultural feature from antiquity. As a rule, conversations on trains and buses are not a good idea. I did see people acting open and friendly, but with close friends or family. It's just reserved, not unfriendly. There are a lot of (clubs) suited to any taste and joining one or two could have helped acquainting myself to a few only if I weren't travelling through most of my leisure time.

Staying away from Melbourne which is more than 14,000km from Stuttgart and my home country India, I did **miss home** sometimes – home is where the heart is, as they say. Fortunately I could rely on two amazing pieces of technology to keep in touch with family and friends back home email, and Skype. Being so far away from my family and from my friends in Melbourne would be so much more difficult without those two, and being able to see people in real-time with webcam is incredible. But I also have a caring and loving group of friends here - they truly are my surrogate family. I am sure to miss all my touring expeditions, dining out with my German friends at Besen restaurants for a typical German feel, and not to forget the ultimate experience of snow and Christmas Markets (weinachtsmarkt) all of which were novel for me. I also once went to watch the classical concerts at the Liederhalle once a month. I never liked classical music but hearing Beethoven's 5th played in his homeland instantly swept me off my feet.

The list of **positive** aspects of living in Germany from my perspective are way too long and outweigh the negatives. The transportation system is world class, punctual, clean, regular, safe and comfortable although they were a little pricey. I felt absolutely safe to walk alone at night. There are organic food stores and outdoor markets everywhere; a pharmacy and doctors office on almost every corner; coffee shops to wake you up every morning are easy to found. Everything we need is within a few blocks and walking is a pleasant way of life; the travel opportunities and the location in central Europe, the history and culture – to name a few. What I also enjoyed the most were the brightly lit Christmas markets at the city centre which start well before Christmas and some continue right through New Year's Eve. A lover of food, particularly Chocolates and crepes as I am and the sights of kids enjoying, families rejoicing together made me visit them nearly every day.

The only **negatives** I can think of are the occasional outright rudeness of Germany and the language barrier. Sometimes even the extremely chilly weather was a bit inconvenient; I quite enjoyed seeing all the houses, vehicles, train tracks, church roofs clad in snow to make them look like giant cakes with sweet butter cream icing. Every day on my train I would look out to pass by a lake with calm and still waters during sunny days and a skating rig for kids during freezing evenings.

Before setting out on the exchange venture, I **never imagined** that my first paper as the first author would get accepted at a prestigious international level conference. I never even dreamt that I would get as adventurous as sitting in the backseat of a car being driven through the Basque Country on the way to San Sebastian, while my fellow travellers (strangers) and I communicated with each other in a combination of French, English, German and Spanish. I also didn't expect that I would develop friendships within three months, the depth of which matches or exceeds that of many of the friendships I've had for years.

It is impossible to put a finger on one **best thing** about the whole trip, because so many of my experiences were fantastic. If I really had to choose one, though, I would have to say that the testing and experimenting of the project. It was an incredible experience to finally see the project in working that had taken so much time and effort by everyone involved with it. The practical knowledge in relation to Mechatronics and Robotics gained here has made the whole journey worthwhile. The acceptance of the conference paper at the IADIS e-society was no less exciting adding to the positive reviews and ranking received for it. First time authors as Jay and I were, the enthusiasm and the hard work put towards writing it up bore fruit. Not to mention, the people that I met over here made my exchange experience what it was; from the deep friendships that I formed, to the brief exchanges with people on the train or in the laboratories and libraries of the University- almost every single person I met added to my experience in some interesting or meaningful way.

On my way back home, I carry with me memories, knowledge and experience that shall never fade each of which has played their role in making me what I am today. There are a few more ideas that are shaping in my mind in regards to my doctoral and the project developed which I intend to put to practice after a closer investigation. I have also learnt tips and tricks for well-organised documentation of technical which will come handy during my future papers and my final doctoral thesis. On a personal level, I tend to live a lot more in the present now. Before my trip I focused a lot on the future what I wanted to do, where I wanted to go, and how I wanted to get there. Living overseas made me realize how significant every moment of my life can be, how important it is to constantly seek out new experiences, and to try to focus my attention on the things that I find most interesting and fulfilling.

To sum up, I am deeply indebted to **Baden-Württemberg-Stipendium** for the financial aid that made the exchange program possible. All the afore-mentioned explorations would not have been possible without their support. Encouraging exchange students promotes International learning and knowledge which in turn drives students towards recognition and identification of an array of different cultural, technological and community variations. Like in my case, it helps develop analytical and problem solving skills apart from enhancing interest in global issues as well as a broader general knowledge. **Both the supervisors** at Home University and Host University for considering me eligible and choosing me to take part in this program. Their constant guidance and support, majorly to Professor Weghorn during these three months has helped us traverse a smooth path towards the success of the project and his valuable suggestions regarding paper-writing have improved my skills. I shall forever be grateful to the **Auslandsamt Office** for the care and concern they show towards exchange students. Their hard work and careful planning form the secret ingredients of success stories of exchange students coming from various parts of the globe. A big thank you to all of you - **Vielen Dank**!