STINT XinT – Excellence in Teaching Program 2012

Final Report From a Semester @ School of Computing National University of Singapore,

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NUS
National University
of Singapore

INTRODUCTION

For exactly one year ago I got the wonderful news that I was one of the selected STINT XinT Fellows of 2012, with destination School of Computing, National University of Singapore. My family and I were going to live in Singapore for one semester, exciting.

In this final report of the Excellence in Teaching scholarship I'll report my experiences from the School of Computing at National University of Singapore (NUS) and our lives in Singapore. The text is divided into three parts; where the first part covers the application process and preparation prior to the commitment at NUS. The main part includes my academic work and general information about the University. The very last part of the text covers of practical issues for my family and me.

Images of Singapore

PREPARATORY WORK

The preparatory work starts somewhat with the application process itself. From the day I submitted my application the possibility of a sabbatical leave was constantly on my mind. It was very nervous when the first announcement came from STINT. Interviews were going to be conducted with candidates, but not all candidates were going to be accepted, which meant an intense period of waiting for the final verdict. The final result arrived in an e-mail during one of my workshops, couldn't open it then but when I got back to my office I trembled on the keyboard and gathered courage to open the e-mail. YES, I was one of the fortunate to be a STINT XinT Fellow of 2012.

A month later STINT arranged a meeting in Stockholm with the STINT XinT Fellows of 2012 as well as prior fellows. Information was given from STINT representatives as well as experience from prior fellows was shared. The meeting was in a way a kick-off meeting and the outcome of the meeting was; 1) met the other STINT XinT Fellows going to Singapore, 2) knew more about what to expect from the planning trip, 3) school for my children will be financed (more about this in the last part). If I had known then what I know today I could of course have asked the "right" questions and gained more from the meeting, but how could I?

PLANNING TRIP

I went to Singapore in the beginning of April 2012 to meet with the head, professor Teo Hock Hai, the deputy head, associate professor Shan Pan Ling, of the Department of Information Systems, School of Computing at the National University of Singapore and

Prof. Teo Hock Hai   *Ass. prof. Shan Pan Ling*

Mdm. Nasila D/O Samuvallu from the Deanery's Human Resources. Prior to the meetings we had some e-mail conversations, but mainly to arrange the up coming meetings. The meetings were very relaxed and I gained good insight in how things work around NUS, how the students are, what modules they offer, and how they reason about teaching a module. I came to the meeting with a thought of co-teaching one or several modules, holding seminars (discussing papers) or giving one module similar to what I teach at my home University, but it seemed to be some reluctance toward such an agreement. It wouldn't be a problem arranging a special module, there were options for that in their programs, but students would probably not apply for a module not given every semester due to deviation from the main path. Students prior to Ph.D. studies are not custom to having paper discussions, so that option was not available either. The fact that lecturers at NUS are award focused and strive for nominations and acknowledgement of their teaching could also mean some reluctance in co-teaching. Now after a semester at the School of Computing such an arrangement wouldn't be any problem, but without knowing who I was or without any evaluations from my module at that time other solutions were discussed. It was a little bit paradoxical since they rather see that a visitor isn't responsible for a module, due to the high quality demands. The discussions were very good and I gained much insight in how the School of Computing works.

When I left Singapore no clear plan was settled, but a lot of e-mail conversations took place the following weeks and I was offered to be responsible of a 3000 level module at the Department of Computer Science, CS3240 – Human Computer Interaction. I got in touch with Dr. Bimlesh Wadhwa, she taught the module in the fall of 2011 and we

planned to meet when I arrived in Singapore. We were both too busy with our ordinary work during the spring so we didn't have any time to make any detail planning before my arrival.

Kent Vale - Staff housing

Nasila from the human resources was very helpful in arranging a visit to Kent Vale, the staff housing of NUS. There were a lot of papers Nasila wanted me to fill in for the contract with NUS, housing, and for the working permit. We had a lot of e-mail communication after my planning trip in order to get everything done paper wise. The staff at NUS is very efficient in getting the paper work in order. It is obvious that they are used to have staff moving in and out of the University. University of Borås could learn a lot from NUS in this perspective, where there is practically no assistance for moving lecturers. See more about this in the last section of this report.

Besides NUS, I had a very important task to conduct during my short visit in Singapore, i.e. finding a school for my daughters. I was hoping that NUS could help me with this, but unfortunately not more than calling one of the schools to make an appointment. After research about schools in Singapore, the only option was an international school. The local schools, which I had in mind, didn't accept overseas students for such a short period of time and their semesters where not coherent with the Swedish semesters. The international schools however are very expensive and I realized that I could only apply to one school since the fee for applying was very high as well. How much it really would cost for my daughters wasn't that easy to figure out, since the different schools had different ways of showing the fees.

I finally visited the Canadian International School, CIS, since it was moderate in term fees and it was the closest one to Kent Vale, where we were going to stay. I didn't get an

answer to whether they had any chance of getting accepted, but I understood that since the campus was brand new (they moved to expand) it was a better chance this year to get

Canadian International School

accepted. When I returned back home to Sweden I paid the registration fees to CIS and crossed my fingers. What would have happened if the weren't accepted? The process of handing in the right papers to CIS was a nightmare; they required papers that we don't have in the Swedish school system. We were lucky that our daughter's teachers in Sweden answered and wrote upon CIS's request. The final contract was 120 pages, that I had to sign every page of, that give you an idea. It was a time with a lot of worries; first we didn't know about the acceptance until the end of June and second, when I called STINT about the school they said they wouldn't pay the whole school fee even though that was the promise before the planning trip. See more about this in the last section of this report.

NATIONAL UNIVERSITY OF SINGAPORE (新加坡国立大学)

"A Leading Global University Centred in Asia, Influencing the Future" is the vision of the National University of Singapore (NUS). NUS is Singapore's flagship university and has established a strong global reputation over its more than 100-year history. In the latest QS University rankings, 2012, NUS was overall ranked 25th in the world and 2nd in Asia.

The National University of Singapore has 16 faculties and schools across three campus locations in Singapore – Kent Ridge, Bukit Timah and Outram. There are over 37,000 students from 100 countries who studies at NUS.

National University of Singapore

School of Computing, SoC

The School of Computing, SoC, is located at the Kent Ridge campus, very convenient for me as I stayed in Kent Vale staff housing opposite the campus. It was walking distance to my office, but since it is very warm and humid in Singapore I most often took the NUS shuttle bus. The School of Computing consists of two departments, Information Systems and Computer Science and was ranked 9th in the world and 1st in Asia in the latest rankings. My contract was written with the department of Information Systems, but the module I was assigned belonged to the department of Computer Science.
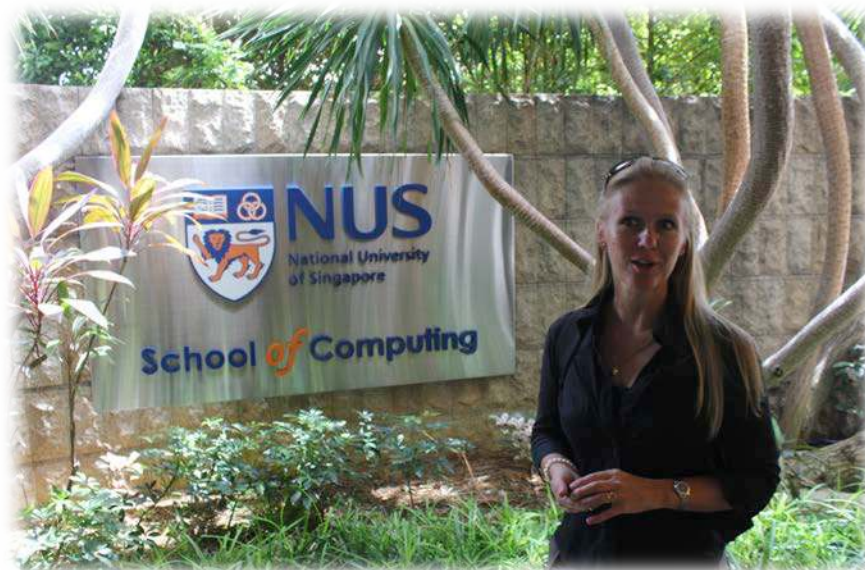
Tropical NUS, @ the entrance of COM2 building, SoC

SoC has an academic staff of about 200, drawn from leading universities ranging from the Ivy League to Oxbridge, and around 2000 students, a quarter of them pursuing graduate studies. The vast majority of the staff is men, as at my home department. Distribution between men and women of the student population is roughly the same as at my home department. One difference is the age span of the students; on average they are younger here at NUS. From a cultural perspective, we have exchange students in Borås but at NUS the students are from different countries and fully integrated, without being regarded as exchange students.

The SoC and School of Business and IT in Borås are both Information Systems and Computer Science Schools/departments, which of course have similarities on modules offered. The work atmosphere is rather different; at SoC excellence is in focus to be able to compete with the best Universities in the world. It is a very inspiring atmosphere where teaching is taken very serious. When you meet someone for the first time they are keen on telling you which University they have their degrees from, MIT, Harvard etc., and then they tell you which module(s) they are teaching. Research is of great importance at NUS and it is as natural to be good researcher as a good teacher, it is very integrated.

Regarding competence development for lecturers, I would say it is taken for granted since pedagogy and research are of great importance. If for instance a lecturer continuously gets low scores on evaluations from students, they try to find means to help that lecturer. A lecturer on the other hand that gets high scores on evaluations can receive a bonus and even be awarded with the NUS Annual Teaching Excellence Award.

The SoC has a close relationship with its environment, as cited from the official web site *"Beyond academia, NUS School of Computing works with both industry and government agencies in spearheading niche research efforts and nurturing talent for the dynamic digital economy… NUS School of Computing works with companies on internships and placements for its students and graduates, and hosts regular visits from industry, academia, high schools and polytechnics"*.

CS3240 – Human Computer Interaction

As mentioned earlier, CS3240 was the module I was responsible for at NUS. The module is given once every semester and is a 4 credits module. I had 74, 2nd and 3rd year, students from different departments/faculties attending the module. All the students had an Asian background, the main part was Singaporeans but other countries were represented e.g., China and Vietnam.

I remember waiting for the NUS shuttle bus after my first lecture, a student of mine from Vietnam came up to me and he expressed his gratitude for being in my class. He also explained to me how fortunate he was to be able to study at NUS; he was here on a

scholarship that he received while in Vietnam. He told me that NUS representatives go to centers throughout Asia and have exams for potential students; if they pass the exams they have a chance to get a scholarship. He continued to tell me that the obligations he had after graduation was to stay and work in Singapore for three years.

It was interesting to have a mix of students with different academic backgrounds, since it enhanced the dynamic in the teams during teamwork.

The amount of lecture hours, lab hours and tutorial hours, as well as the time slots for each was already given when I arrived at NUS. My lecture hours were on Friday afternoons, tutorials on Tuesdays and Wednesdays, and lab sessions on Thursdays and Fridays. Since students attend 4-5 modules during a semester the time slots are very rigid and changes are almost impossible. It made it difficult to find suitable time slots for project work examinations since the constellation of the teams could be of students attending different modules and they belonged to different tutorial- and lab groups.

I was lucky to be assigned a teaching assistant (TA), Ben Choi Chung Fung, during the whole semester. Ben is a skilled Ph.D. student who has been very helpful. Being new at a workplace is somewhat confusing, but Ben always helped me when questions arose. There

TA. Ben Choi Chung Fung during a tutorial session

were a lot of questions about NUS different administrative systems in the beginning; what systems did they have and when did I use which. Since I was the module owner I was expected to report results and grades into NUS IMMS system. It was a blessing to have Ben to ask and to get support from, no matter what question I had. Ben also held the tutorials, and for the lab sessions I hired two lab assistants, Shivam Pathak and Nitika Gupta (just returned from Stanford University).

Shivam Pahtak and Nitika Gupta at a lab session

I constructed the questions to be discussed during tutorial session and the lab assignments, but didn't handle the tutoring. To understand how sessions like these are held at SoC I went to the sessions but tried not to interfere.

My colleagues at SoC kept on telling me that the students at NUS are very quiet and do not discuss much during lectures, so I took this into consideration while planning my lectures. This was a great challenge since my module was a design course, where creativity and innovation are in focus. How could I create a thinking "out-of-the-box" spirit in the class? This is something I think we manage to do in the Swedish education, so my prior experiences came in handy here.

Dr. Bimlesh Wadhwa, who taught this module last year, and I had a lot of discussions about course structure, content, what to expect from students, suitable course literature etc. I gained a lot of knowledge from her regarding how the academic life at NUS in general and SoC in particular was; how they see upon teaching, meetings, research etc.

Dr. Bimlesh Wahhwa and I in her office at SoC, COM2. #02-12

NUS is a very competitive University and it's taken for granted that if you are a part of NUS you take your duties very seriously. A huge difference between the University in Borås and NUS is that teaching is highly valued and the lecturers are given the possibilities to deliver high quality modules. It was a joy to teach at NUS, even if the module I taught was a new module for me and required a lot of preparation time I found the time to deliver a module both the students and I found interesting and qualitative. Furthermore, for the first time ever as a lecturer I had the time to dig into the content of the module and reflect upon things thoroughly within the timespan of the module.

The students were graded based on 40% written exam and 60% continual assessments. The routines for final exams were settled to ensure quality and minimize errors. Early in the semester I had to provide information about the structure of my exam, what answer sheets I needed, if I planned to use Multiple Choice Questions etc.
Half term, the final exam had to be finalized and sent to a moderator. The role of the moderator was to check if the exam was suitable for the module e.g. did the level of the exam mirror the level of the module, and if there were any errors in the exam e.g. unclear formulations, spelling errors or calculation error. There were special procedures during the final exam as well as after. A chief invigilator is selected for each module, and as visiting staff both the chief invigilator an I were present during the exam as well as someone from the administration. After the examination it was a very intensive week to grade all the exams before handing over all the exams to a moderator who checked the exams for any errors regarding how the exams were graded as well as the total sum of the exams both on the exam papers and in IMMS. One major difference between NUS and my home department is that the students never get a chance to see the final exams; they only get to know the final scores. There are no extra opportunities for writing the final exam. If a student doesn't write the exam there are two options, attend next year's module or deduct the percentage of the exam from the total sum of the whole module. I think we have much to learn from how examinations are handled at NUS and I plan to discuss this further when I return to Borås. I will invite interested staff throughout the whole University to talk about my experiences from the SoC at NUS.

Final exams as well as the continual assessments are graded with percentage i.e., if a lab assignment is handed in late a deduction of the maximum percentage is done or if a student choose not to hand in the assignment full deduction is made. There are no such things as revisions or possibilities to add things after deadline.

The semester ends with a grading meeting, where you present your module's distribution of grades. If there is a deviation from the University norms you have to argument for your grading as well as write a report to explain why. If the explanation you have is accepted no further actions are taken. Interesting meeting indeed.

To return to the planning of my module; I previously stated that I had to come up with ways of getting the students to be more willing to discuss and think out of the box. I

arranged one activity in particular during one of my lectures with the intention of bringing chaos in the classroom, to quote Nietzsche *"out of Chaos comes order"*.

Besides the lectures I met the students during their project work, tutoring the teams in their progress to their final design implementation. These hours were my favorites during the semester, since I got a chance to know the students better. I was amazed by their focus and hard work. Another part of the continual assessment was for the teams to write blogs about given topics every week. To add some dynamics to the lectures I let two teams present their blog at most of the lectures.

The semester included 13 weeks of instruction and 2 weeks of examinations, with a recess week after six week. During the recess week I had time to prepare for the upcoming e-week. During week 8 everything had to be done using IT, except for lab sessions. I looked forward to this, since I have a lot of experience of distance education. I planned for this week as soon as I heard about it and during recess week the time was given to act upon the plan. I was video recorded at different locations in Singapore to make the recorded lecture more exciting e.g. in the rainforest at Bukit Timah, IKEA to underline my origin and also at Clementi Woods close to Kent Vale.
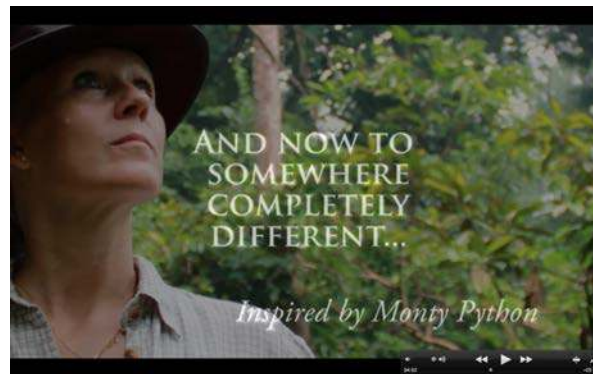
A frame from the e-week lecture in week 8

Students expressed their likings to my e-week lecture and I was also told that this was a new addition to e-week. Usually lecturers present slides and provide audio to the slides, not motion pictures. If a chance is given to come back to NUS I would like to discuss my experiences of distance education with my colleagues. The students also expressed their likings to the addition of a guest lecturer during part of one of my lectures. I invited assistant professor Shengdong Zhao to talk about some of the work they do at the HCI lab at SoC.

I'm overall very satisfied with my module and so were the students according to the students' evaluation at the end of the semester. There are lessoned learned that I will bring back home to the University of Borås and I have also shared my experiences with Dr. Bimlesh Wadhwa at NUS.

Activities during the semester other than my own module

In mid August I received a phone call from Associate Professor Min-Yen Kan, who wanted to discuss how I planned to conduct my module and the content of it. He had an interest in my module since he was going to teach the advanced HCI module, CS4249-Phenomena and Theories of Human-Computer Interaction. During the semester Min attended my Friday lectures as well as I attended his Tuesday lectures. This was a perfect way for me to see how a well-reputed lecturer at SoC gives lectures; the pedagogy he used; how he approached the students and what he covered during his lectures. Since Min attended my lectures, I got valuable feedback continuously.

Associate professor Min-Yen Kan and I during a break at one of my Friday lectures

Ass. Prof. Min-Yen Kan also organized a project showcase, which I attended. This was a splendid happening where 5 modules presented their project works. "*The School of Computing Term Project Showcase aims to bring together all of the class-based projects and project module in SoC. It's a festive yet serious class showcase, in which students present their class projects in all aspects of computer science and information systems to the respective faculty for review and grading.*"

1st School of Computing Term Project Showcase

What I specially liked about the Showcase was that the students got graded during that evening and in the end of the happening winners from each module were presented and given prizes. The people invited to the Showcase were able to vote for the teams they liked the most with an argument of why. I'm invited to next years (April 2013) Showcase and it would be interesting to participate and see how it will evolve from last year's pilot.

Another event I attended was the NUS-HCI lab open house, organized by Assistant Professor Shengdong Zhao. Their research was presented in a nice and interesting way; they are also looking into 3D technology, which is in my interest as well.

I also made a heuristic evaluation of two Ipad applications, which were developed as part as a student's Final Year Project (FYP). I attended the examination of his FYP and it started out like most of our examinations at University of Borås with a presentation by the author. The examiners then made remarks about the work, but it was mainly criticism, not a learning opportunity with constructive feedback as it usually is at my home university. There is usually a discussion between the examiner and the tutor back in Borås, but as I understood it that wasn't the case here.

Continuously lunch meetings with colleagues gave me better insight in how they looked upon things at NUS as well as gave me ideas in my teaching. All encounters with colleagues enrich my professional life as well as my social life. The other XinT Fellow at NUS, Professor Simon Harvey, and I had many informal discussions during the semester where we exchanged experiences from our departments.

Simon and I were invited to a meeting with Professor Bernard Tan, Vice Provost for Education, and Associate Prof Chng Huang Hoon, Associate Provost for Undergraduate Education in November. At this meeting we discussed our experience at NUS as XinT Fellows and how they looked upon our visit at NUS. The most interesting idea that came up was how we could work out an arrangement where we, as XinT Fellows, could return after a certain time to NUS. In that way we would be able to; reflect on our experience at NUS; try out our experience in our home Universities; and finally improve our way of excellence at NUS on a revisit.

A couple of months earlier I met Professor Bernard Tan over lunch where we informally discussed the XinT scholarship. I must say that it was a little bit embarrassing that the announced meeting with STINT representatives in October would take place on a public holiday.

PRACTICAL ISSUES

PREPARATORY ACTIVITIES

Many things were to be organized before the move to Singapore and there are some issues I would like to address in order to make improvements.

The time and energy spent on arranging for the move has been out of proportions. Without any prior experience of moving my whole family to a far away country, assistance from some knowledgeable party was needed. There are many organizations in Sweden who are sending their employees with families to Singapore or other countries. My suggestion is that STINT contacts them to see how they prepare everything from working permits to schools for their children or insurances for that matter. The worries the uncertainty has caused me could have been avoided by better guidance. I'm still very concerned about the school fees for my daughters, are the fees going to be covered as promised at the March meeting? My husband had to spend 4 hours every day to take the children to and back from school since we couldn't afford the fees for the school bus; this is not acceptable.

I have not seen any specification of how the scholarship was calculated, but I was told that a special category was for vaccination, visa and insurances. The amount mentioned didn't even cover the vaccination prior to the trip. What about the costs for working permit, insurance, and the medical examination my family and I had to do upon arrival at NUS?

The scholarship is fantastic and I feel very fortunate to be a XinT Fellow, but

better management would have easily avoided the worries caused by insufficient information and financial questions.

My advise to STINT is to do better research about the destination you send fellows to. For instance, why pay market rent at the staff housing at Kent Vale when NUS staff pays half the amount. The meeting in October with STINT representatives would have been much better off during another day than a public holiday. The day also coincided with the only holiday my children had during the whole semester. While in another region of the world one needs to take the opportunity to get culturally enhanced to get a better understanding of the environment in the region, which meant that I couldn't attend the meeting.

I'm to your disposal if you need any help in producing guidelines/checklists for coming XinT Fellows since I now possess hands-on experience.

Conclusion

I'm very thankful for everything the XinT scholarship has meant for my family and me. I would also like to thank the University of Borås for all the support they have given me in the application process. The XinT scholarship has made it possible to broaden my perspectives professionally as well as a personally. To get this wonderful opportunity to be active in my professional role at one of the best Universities in the world is something that has changed me for the rest of my life. The contacts and network I have created is of great importance for me as well as for the University of Borås or other Universities in Sweden.

I sincerely hope that an exchange like this is something most of us can get a chance to do.

Signing off with high hopes of returning to NUS in the near future. My family and I love Singapore.

Malin Nilsson
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Note: Photos are taken from the NUS official web site or by myself.