Curriculum Development in Data Science and Artificial Intelligence
599600-EPP-1-2018-1-TH-EPPKA2-CBHE-JP

Leiden Study Visit Report

December 2019

PROJECT INFORMATION

Acronym	DS&AI
Project Title	Curriculum Development in Data Science and Artificial Intelligence
Contract Number	599600
Start Date	15 November 2018
Duration	36 months

DELIVERABLE INFORMATION

Deliverable Number	WP2.2.2
Deliverable Title	Study visit to Leiden for curricula development
Submission Due Date	Dec 20, 2019
Actual Submission Date	Dec 20, 2019
WP Number and Title	WP2: Development
Lead Beneficiary	LEU
Dissemination Type	Report
Dissemination Level	Department/Faculty, Institution, Local, Regional, National, International
Quality Reviewer 1	USJP
Quality Reviewer 2	AUEB
First Quality Review Date	27 March 2020
Quality Review Pass Date	20 August 2020

DISCLAIMER

Contents

Abstract

This is a report on the DS&AI study visit organized by LEU, on November 11 to 15, 2019. It was the second of the two European study visits planned under work package 2.2 (Study Visits). The meeting was combined with the coordination meeting in the context of the activity (WP7.1), hosted at Leiden University, The Netherlands.

The study visit combined teaching experiences, lab visits, technical talk, meeting with staff, and workshops to collaboratively finalize the outlines of the elective courses and trainings as described in WP2 (Development). The several activities were all well attended, the participation of the partner was high, and the atmosphere very friendly. In fact feedbacks on the study visit were generally positive, and suggestions on weaknesses and ideas for improvement were gathered to be used to improve future meetings.

Introduction

From November 11 to 15, 2019 Leiden University hosted the second of the two European study visits planned under work package 2.2 (Study Visits). The first two days of the study visit were combined with the coordination meeting in the context of the activity (WP7.1), hosted at Leiden University, The Netherlands.

The study visit combined teaching experiences, lab visits, technical talk, meeting with staff, and workshops. The final programme is described below. During the workshops the project partners had the possibility to finalize the outline of the elective the elective courses and trainings as described in WP2 (Development). We first selected which were the course of interest, and then in small working groups we developed a first draft of the course outlines. These were reviewed by a different group, and finalized by taking into account the comments received.

Participant List

Num	Name	Country	Intitute
1	Matthew Daley	Thailand	Asian Institute of Technology
2	Chutiporn Anutariya		
3	Vatcharaporn Esichaikul		
4	Chitsutha Soomlek	Thailand	Khon Kaen University
5	Wararat Songpan		
6	Paweena Wanchai		
7	Khaon Sunat		
8	Siraporn Sakphrom	Thailand	Walailak University
9	Suratsavadee Koonlaboon Korkua		
10	Thimaporn Phetkaew		
11	Chirawat Wattanapanich		
12	Supachok Korkua		
13	Edwan Kardena	Indonesia	Institut Teknologi Bandung
14	Ayu Purwarianti		
15	Nugraha Priya Utama		
16	Opim Sitompul	Indonesia	Universitas Sumatrae Utara
17	Erna Budhiarti Nababan		
18	Mahyuddin Nasution		
19	Esther S.M. Nababan		
20	Taufik Fuadi Abidin	Indonesia	Syiah Kuala University
21	Samadi Samadi		
22	Rahmad Dawood		
23	Amalka Pinidiyaarachchi	Sri Lanka	University of Peradeniya
24	Tuan Usoof		
25	R.D. Nawarathna		
26	P.M.P.C. Gunathilake		
27	Chitraka Wickramarachchi	Sri Lanka	University of Sri Jayewardenepura
28	Gishantha Fernando		
29	Gamini Dehigaspitiyage		
30	Rajitha Silva		
31	Katerina Fraidaki	Greece	Athens University of Economics and Business
32	Marianna Skiada		
33	Sofia Barbosa Pereira	Portugal	University of Minho
34	Sara Mota		
35	Chrysoula Psyllaki	Greece	Skybridge
36	Marcello Bonsangue	Netherlands	Leiden University

37	Esme Caubo		
38	Felienne Hermans		
39	Frank Takes		
40	Suzan Verberne		
41	Jan van Rijn		

Study Visit Programme

Monday 11th November 2019 (Snellius building, Niels Bohrweg 1 2333 CS Leiden)

9:15 – 11:00	Course MSc Computer Science: *Automated Machine Learning* (HUYGENS 106-109)
	Course MSc ICT in Business: *Leading and Managing People* (SNELLIUS B02)
11:15 – 13:00	Course MSc Computer Science: *Quantum Algorithms* (SNELLIUS 412)
	Course MSc Media Technology: *Human Computer Interaction & Inf. Vis.* (SNELLIUS 413)
13:00 – 14:00	Lunch (Snellius canteen, with a voucher)
14:15 – 16:00	Course MSc Computer Science: *Computational Molecular Biology* (SNELLIUS 408)
	Course MSc Computer Science: *Social Signal Processing* (SNELLIUS 407-409)
	Course MSc Media Technology: *Hardware & Physical Computing* (SNELLIUS 413)
17:00 – 18:00	Boat trip (Blauwpoortshaven 5, 2312 EL Leiden)
18:30 –	dinner (Het prentenkabinet, Kloksteeg 25, 2311 SK Leiden)

Tuesday 12th November 2019 (Snellius building, Niels Bohrweg 1 2333 CS Leiden)

9:15 – 11:00	Course MSc ICT in Business: *Corporate Decision Making* (GORLAEUS EM109)
11:15 – 13:00	Course MSc ICT in Business: *Systems Development* (SNELLIUS 313)
	Course MSc Media Technology: *Introduction to Programming* (SNELLIUS 413)
13:00 – 14:00	Lunch (Snellius canteen, with a voucher)
Option 1 (social programme):	
14:10 – 15:00	Train to The Hague
15:30 – 17:15	Visit to the Centre of Innovation Leiden University
	(Room A2.02, Schouwburgstraat 2, 2511 VA The Hague)
Option 2 (courses):	
14:15 – 16:00	Course MSc Computer Science: *Cloud Computing* (SNELLIUS 402)
16:15 – 18:00	Course MSc Computer Science: *Advanced Data Management* (SNELLIUS 407-409)

Wednesday 13th November 2019 (Room 313, Snellius building, Niels Bohrweg 1 2333 CS Leiden)

Option 1 (main programme):	
9:15 – 11:00	Discussion sessions on curricula development: *Choice of electives*
11:15 – 12:00	Discussion on planning curricula and training material
Option 2 (courses):	
9:15 – 11:00	Course MSc Computer Science: *Text Mining* (SNELLIUS 407-409)
	Course MSc ICT in Business: *Data Driven Policy Making* (Den Haag, WYNHAVEN 348)
12:00 – 13:00	Lunch (Snellius building, room 176)
Option 1 (main programme):	

13:00 – 17:45	Discussion sessions on curricula development: *4 electives en 3 training courses*

Option 2 (courses):	
14:15 – 15:00	Course MSc Computer Science*: Evolutionary Algorithms* (SNELLIUS 407-409)
15:15 – 16:00	Course MSc Computer Science*: Evolutionary Algorithms* (SNELLIUS 407-409)
16:15 – 18:00	Course MSc Computer Science*: Complex Networks* (HUYGENS 226)
	Course MSc Computer Science*: Master Class* (SNELLIUS 407-409)
	Course MSc ICT in Business*: Computing and Public Policy in European and International Perspective* (SNELLIUS 313)

Thursday 14th November 2019 (Room 312, Snellius building, Niels Bohrweg 1 2333 CS Leiden)

Option1 (main programme):	
10:00 – 11:00	*ADSL: The applied data science lab of LIACS*, Bas van Stein
11:00– 12:00	Examples of master and bachelor thesis (Jan van Rijn)
12:00– 13:00	Meet Frank Takes, teacher of *Social Network Analysis*
Option 2 (courses):	
9:15 – 11:00	Course MSc ICT in Business*: Software Development & Product Mngt* (SNELLIUS 407-409)
11:15 – 13:00	Course MSc Computer Science*: Foundations of Software Testing* (SNELLIUS 403)
	Course MSc Media Technology: *Human Computer Interaction & Inf. Vis.* (SNELLIUS 413)
13:00 – 14:00	Lunch (Snellius building, room 176)
Option 1 (main programme):	
14:15 – 15:00	*Computing infrastructure of LIACS*, Kris Rietveld
15:20 – 15:50	Demos *LIACS Media Lab*, Michael Lew and Erwin Bakker
16:00 – 17:00	Visit to the *Media Tech lab* and *Imaging Lab*
Option 2 (courses):	
14:15 – 16:00	Course MSc Computer Science*: High Performance Computing* (SNELLIUS 408)
	Course MSc Computer Science*: Statistical Learning Theory* (SNELLIUS 174)
16:15 – 18:00	Course MSc Computer Science*: Introduction to Data Science* (SNELLIUS 408)
17:15– 19:00	Honour College: *Introduction to Programming in Python* (t.b.a.)
18:00 –	Dinner (De Waag, Aalmarkt 21, 2311 EC Leiden, Netherlands)

Friday 15th November 2019 (Room 312, Snellius building, Niels Bohrweg 1 2333 CS Leiden)

Option 1 (main programme):	
9:15 – 13:00	Discussion sessions on curricula development: *7 electives*
Option 2 (courses):	
9:15 – 11:00	Course MSc Computer Science*: Social Network Analysis-lab* (SNELLIUS 306-308)
11:15 – 13:00	Course MSc Computer Science*: Social Network Analysis* (SNELLIUS 174 & 405)
	Course MSc Media Technology: *Playful & Creative Science* (SNELLIUS 413)
13:00 – 14:00	Lunch (Snellius building, room 312)

Option 1 (main programme):	
14:15 – 15:30	*Meet DS & AI scientists*
	(Jan van Rijn, Felienne Hermans, Wojtek Kowalczyk, Arno Knobbe, XiXu Li, Fons Verbeek, Maarten Lamers, Walter Kosters, Mitra Baratchi, Mirjam van Reisen)
15:30 – 16:00	Closing session – Marcello Bonsangue
Option 2 (courses):	
14:15 – 16:00	Course MSc Computer Science*:* Audio Processing and Indexing (SNELLIUS 303)
	Course MSc Computer Science*:* Multi Media Systems (SNELLIUS 408)
	Course MSc ICT in Business: Capstone Case (SNELLIUS 407-409)

Photos

Evaluation Reports

Evaluations reports have been filled by 4 participants on 13 November 2019 and 23 participants on 15 November 2019 out a total of 41 participants.

Question: How satisfied are you	Completely satisfied	Satisfied	Neutral	Dissatisfied	Completely dissatisfied	N/A
1. with the preparations made to organize the meeting?	96%	4%	0%	0%	0%	0%
2. with venue arrangements and accommodation?	85%	15%	0%	0%	0%	0%
3. with support (meeting rooms, equipment) provided during the meeting?	78%	22%	0%	0%	0%	0%
4. with the structure of the agenda (subjects/issues covered)?	78%	22%	0%	0%	0%	0%
5. with the time assigned to the discussion of important issues?	70%	26%	4%	0%	0%	3%
6. with the scope of information presented?	70%	30%	0%	0%	0%	0%
7. with the meeting's overall value in helping you achieve project goals?	78%	22%	0%	0%	0%	0%
8. with the quality of the overall meeting?	70%	30%	0%	0%	0%	0%

Comments on "What were the strengths of this meeting?":
- Perfect!!
- The structure of the agenda (schedule) was organised well.
- We've got to see the education system, management, equipment, and good practices in various perspectives.
- Gain mutual understanding and knowledge.
- Meetings were well organized and included fun events as well.
- Free to ?? ?? points. Very cordial, friendly. Well ??.
- Venue of ????, ???
- Program was tight??.

- Organization of the meeting was very good.
- The organizer and the rest of the team were very kind.
- LEU was a good choice.
- Meetings were conducted in a very friendly and cordial manner.
- The nature (Atmosphere?) of the environment of the meeting's location was very good.
- Everything went as planned.
- All the topics were covered.
- Discussed the outlines of elective course units & finalized them (collaboratively).
- To work with academics of different countries.
- Completed!!!
- Too long walk to various experiences. A lot of differences, ?????.
- Close interaction between partner participants.
- New experience on conducting classes and labs.
- All the participants worked well together. Great cooperation between European and Asian participants.
- PM, project coordinators (Europe & Asia) were very helpful & supportive.
- The host was very informative.
- Completed electives.
- Tour of relevant labs.
- Good and clear progress for the programs.
- Collaboration with other institutes and the sharing of ideas and expertise.
- Organized well. Contribution from the members was at a very good level. Facilities provided were very good.
- This meeting helped all of us prepare the elective course outlines. These outlines were required to prepare the complete curriculum for the MSc programme.
- Well arranged & focussed.
- Well organized and focussed discussions.
- Active participation and collaboration of all partners.

Comments on "What were the weaknesses of this meeting?":
- We changed the room quite often so we need to ensure that we come to the right place beforehand. (Put all the location map and confirmation for the next day always given – which is good)
- A bit lengthy.
- The scope of the project was very large. Therefore, the schedule ended up being very tight.
- The weather!
- Too hard for achieving conclusions.
- The venue was okay but it was somewhat far from our hotel.
- Lab visit was too short.
- Too little time for the lab tours.
- Information about reports such as time ?? travel report need more information.

- 17 elective courses have been discussed during the meeting. Not all of them were proposed by the institutions but during the outlines, some of the participants were assigned to prepare courses that were not proposed. It is hard to prepare for the courses that we never teach.
- Some participants from the European partners were assigned an admin role and were not able to contribute much to the workshops/discussion(s).

Comments on "Ideas for improving project meetings":
- Microphone should be provided/present.
- Encourage active participation.
- Group discussions may be arranged with the similar discipline experts.
- Do it during a sunny season °ʊ°
- Program was a little bit compact. It would have been better if it could've been expanded to include a couple of more days.
- More ?? information in a group. Use technology facility.
- More dissemination by universities for supporting the program/project.
- More support for facility. Especially for Muslims who need to pray during the break.
- Please spare some more time (half a day?) on each lab in order to get more experience.
- The percentage of progress for?from? each WP should be ???
- To have the course outlines designed & prepared by those who have an expertise on those courses.