

# KnowledgeEngineering@Work

Study and work in the era of Data Science



**Department of Data Science and Knowledge Engineering** 



## What is KE@Work?

- Special path in the Bachelor Data Science and Knowledge Engineering in years 2, 3
- Part of the honours program; only for excellent and motivated students
- 2 year study/work program with a company/organization in the region
- Students combine work and study on a 50/50 basis
- Students receive ECTS credits and monthly "internship" fee
- Quality control and supervision by academic staff
- 3-Party contract with fixed fees (amount under revision)





#### Main features of KE@Work

- BY2: no classes scheduled on Wednesday and Thursday
- BY3: no classes scheduled on Tuesday and Wednesday
- Project weeks in period 3 and 6, students work full time
- Resit weeks, students work full time
- Holidays: students continue to work
- KE@Work replaces 3 projects
- Students write bachelor thesis at company (on topic relevant for company)



### **KE@Work** advantages (businesses)

- Easy access to talented and scientifically trained programmers/modellers
- Long term professional relation with relatively inexpensive student workers
- Flexible young student workers, adjustable to the needs of the business
- Student worker can address structural projects within the business
- Student worker can operate more and more independently over time
- Quality control and supervision by UM-staff
- Easy access to scientific advice





## **KE@Work** advantages (university)

- Higher student inflow by attractive and exceptional program
- Business feedback to maintain cutting edge study content
- Reimbursement of supervision costs
- Paving the way for local research collaboration







### **KE@Work advantages (students)**

- Accquire relevant "work" experience
- On real-life science applications
- While enjoying expert supervision
- And being part of a professional team
- As a paid intern
- Whose work is also awarded in ECTS







## KnowledgeEngineering@Work



Started 2014











#### **KE@Work** already 57 contracts signed:





























Smart Plant Analysis



















Department of Data Science and Knowledge Engineering





#### **KE@Work numbers**

- 14 projects started in 2014/2015, 10 completed
- 12 projects started in 2015/2016, 11 completed
- 18 projects started in 2016/2017, 14 to be completed soon
- 13 projects started in 2017/2018, 12 up and running
- 25 projects expected to start in 2018/2019
- 130 students started the bachelor program last September
- 31 nationalities
- 30 percent are female



#### **KE@Work** timeline: January-March

- Student selection based on grades and motivation
- Submission of short project proposal (½ A4)
- Deadline: March 31, 2018

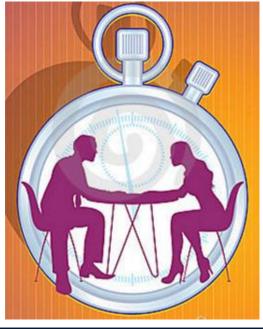




#### **KE@Work timeline: April-May**

- Kick-off meeting: pitches
- Students indicate preferences
- Speed dates: MATCH!



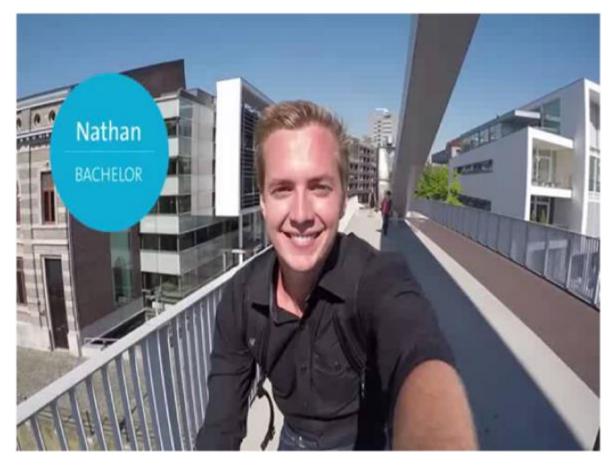


**Department of Data Science and Knowledge Engineering** 





#### **KE@Work** from a student's perpective



**Movie clip Nathan** 



## Any questions?





## Main features of KE@Work

2015 – 2016 Schedule 2.4 Bachelor programme Version 07-03-20						rsion 07-03-2016					
1/2 – 1/4		Monday		Tuesday		Wednesday		Thursday		Friday	
Week	Time	Course	Room	Course	Room	Course	Room	Cou	Room	Course	Room
	08:30 - 10:30			PS	Tapijn, building Z			<u> </u>		MM	1.001 + 2.009
Week 1	11:00 - 13:00			MM	Tapijn, building Z	PO *	0.015			HCI	Tapijn, building Z
Mo: 1/2	13:30 - 15:30	TCS	Tapijn, building Z	TCS	Tapijn, building Z					Thesis info #	0.015
	16:00 - 18:00	HCI	Tapijn, building Z								
	08:30 - 10:30									MM	1.001 + 2.009
Week 2	11:00 - 13:00			MM	Tapijn, building Z	P	0.001 SSK39			MM	Tapijn, building Z
Mo: 15/2	13:30 - 15:30	TCS	Tapijn, building Z	HCI	Tapijn, building Z						
	16:00 - 18:00	HCI	Tapijn, building Z	TCS	Tapijn, building Z						
	08:30 - 10:30			PS (group 1)	0.009	PS (group 2)	0.009			MM	1.001 + 2.009
Week 3	11:00 - 13:00			MM	Tapijn, building Z	P w	0.001 SSK39			MM	Tapijn, building Z
Mo: 22/2	13:30 - 15:30	TCS	Tapijn, building Z	HCI	Tapijn, building Z						
	16:00 - 18:00	HCI	Tapijn, building Z	TCS	Tapijn, building Z						
	08:30 - 10:30									MM	1.001 + 2.009
Week 4	11:00 - 13:00	TCS	Tapijn, building Z	MM	Tapijn, building Z	Р	0.001 SSK39			MM	Tapijn, building Z
Mo: 29/2	13:30 - 15:30	TCS	Tapijn, building Z	HCI	Tapijn, building Z						
1110. 25/2	16:00 - 18:00	HCI	Tapijn, building Z	TCS	Tapijn, building Z						
	08:30 - 10:30				127					MM	1.001 + 2.009
Week 5	11:00 - 13:00	TCS	Tapijn, building Z	MM	Tapijn, building Z	Seminar	Tapijn, building Z			HCI	Tapijn, building Z
Mo: 07/3	13:30 - 15:30	TCS	Tapijn, building Z	TCS	Tapijn, building Z	Р	0.001 SSK39				
1110.0773	16:00 - 18:00	HCI	Tapijn, building Z	HCI	Tapijn, building Z						
	08:30 - 10:30			PSAR	Tapijn, building Z					MM	1.001 + 2.009
Week 6	11:00 - 13:00	TCS	Tapijn, building Z	MM	Tapijn, building Z	Р	0.001 SSK39			MM	Tapijn, building Z
Mo: 14/3	13:30 - 15:30	TCS	Tapijn, building Z	HCI	Tapijn, building Z						
	16:00 - 18:00	HCI	Tapijn, building Z	TCS	Tapijn, building Z						
	08:30 - 10:30										•
Week 7	11:00 - 13:00	MM \$\$	Tapijn, building Z	MM	Tapijn, building Z		İ	PFP ^	2.015	0	45.44
Mo: 21/3	13:30 - 15:30	TCS	Tapijn, building Z	TCS	Tapijn, building Z					Goo	d Friday
	16:00 - 18:00	HCI	Tapijn, building Z								
Week 8 Mo: 28/3		Easter break (No exams)		Exams		Exams		Exams		Exams	



#### Main features of KE@Work

	Year 2				
	Weeks/Block	Days/Week at Company	Days/Week at UM		
Dlock 1	7	2	3		
Block 1	1	0	5		
Dlock 2	7	2	3		
Block 2	1	0	5		
Dlock 2	3	4	1		
Block 3	1	0	5		
Block 4	7	2	3		
BIOCK 4	1	0	5		
Block 5	7	2	3		
BIOCK 5	1	0	5		
Block 6	3	4	1		
DIUCK 0	1	0	5		
Other	Other 12		1,5		
# Weeks	52	122	138		

	Year 3					
	Weeks/Block	Days/Week at Company	Days/Week at UM			
Dlock 1	7	2	3			
Block 1	1	0	5			
Block 2	7	2	3			
BIOCK 2	1	0	5			
Plack 2	3	4	1			
Block 3	1	0	5			
Block 4	7	2	3			
BIOCK 4	1	0	5			
Dlock F/6	11	4	1			
Block 5/6	1	0	5			
Other	7	4	1			
August	5	0	0			
# Weeks	52	126	109			

Balance in Days				
At Company	At UM			
248	247			
50%	50%			