

Scalable Uncertainty Management

00 – Organization

Rainer Gemulla

April 20, 2012

Lecture

- Website & news
 - ▶ <http://www.mpi-inf.mpg.de/departments/d5/teaching/ss12/sum/>
 - ▶ Access from outside: sum / certain
- When?
 - ▶ Friday, 2:15PM-3:45PM, R021, building E1.4 (MPI-INF)
- Who?
 - ▶ Lecturer: Rainer Gemulla
 - ▶ TAs: Luciano del Corro, Kaustubh Beedkar
 - ▶ Contact: sum12@mpi-inf.mpg.de
- For whom?
 - ▶ Bachelor, master & grad school students
 - ▶ Computer Science / Computer and Communications Technology
 - ▶ 6 credit points
- Assumed knowledge (briefly refreshed in lecture)
 - ▶ Database management systems
 - ▶ Basic probability theory

Exercise group

- When?

- ▶ Weekly, probably starting Apr 30 – May 5
- ▶ **Vote until Apr 26** for time slot at <http://www.doodle.com/8hxqxkrs86cbwbwg>

- How?

- ▶ Run by Luciano del Corro and Kaustubh Beedkar
- ▶ Solutions presented by students
- ▶ Presenters must send in solutions 2 days in advance: sum12@mpi-inf.mpg.de; we provide timely feedback
- ▶ Q&A and discussions

- Goals

- ▶ Gain a comprehensive understanding of the topics discussed in class
- ▶ Discuss, solve, program, play

	Sun 22	Mon 23	Tue 24	Wed 25	Thu 26	Fri 27
9:00 AM						
10:00 AM			10:00 AM SUM Tutorial		10:00 AM SUM Tutorial	
11:00 AM			Yes No		Yes No	
12:00 PM						
1:00 PM						
2:00 PM		2:00 PM SUM Tutorial	2:00 PM SUM Tutorial	2:00 PM SUM Tutorial	2:00 PM SUM Tutorial	
3:00 PM		Yes No	Yes No	Yes No	Yes No	
4:00 PM		4:00 PM SUM Tutorial	4:00 PM SUM Tutorial	4:00 PM SUM Tutorial	4:00 PM SUM Tutorial	
5:00 PM		Yes No	Yes No	Yes No	Yes No	
6:00 PM						

Certificate

- Registration in HISPOS
 - ▶ Must!
- Present ≥ 2 convincing solutions in exercise group
 - ▶ Must!
 - ▶ Bonus points for presenting more than 2 solutions (up to 2) or solving bonus exercises (up to 3)
- Actively participate in exercise group
 - ▶ Should!
- Oral exam
 - ▶ Must!
 - ▶ At end of semester (probably Jul 30 – Aug 3)
 - ▶ In English (or, upon prior request, in German)
 - ▶ Bonus points can be used to improve grade (up to 0.1 per BP)
 - ▶ We test *understanding*, not learning by heart
 - Example questions in exercises

What to expect?

- From us

- ▶ Lecture notes and assignments online day before lecture (hopefully!)
- ▶ Feedback on your exercises
 - ★ Individual or group solutions
 - ★ Send to sum12@mpi-inf.mpg.de
- ▶ Discussion of issues and questions around the course
 - ★ Email us!
 - ★ Appointments on demand
- ▶ Anything you'd like to add?

- From you

- ▶ Be here (physically and mentally)
- ▶ Be active (ask questions, answer questions)
- ▶ Laptops for note-taking only
- ▶ Work through exercises before exercise group

Literature

- SUM is a recent and active research topic
→ few established textbooks
- Dan Suciu, Dan Olteanu, Christopher Ré, Christoph Koch
Probabilistic Databases
Morgan & Claypool, 2011
- Charu C. Aggarwal (Ed.)
Managing and Mining Uncertain Data
Springer, 2009.
- Daphne Koller, Nir Friedman
Probabilistic Graphical Models: Principles and Techniques
The MIT Press, 2009
- More in lecture notes