



# Future Cloud Summer School

## June 27-July 8, Stockholm

Sarunas Girdzijauskas, KTH

# Summer School Setup

- **EIT Digital Summer School on Cloud and Big Data**
  - **41 students (32 EIT Digital Master students, 9 external)**
    - 17 different universities, 21 nationalities!
    - We will form 8 teams of 5-6 people
  - **Two weeks, two parts:**
    - Crash course on Cloud and Big Data(1st week)
    - Innovation and Entrepreneurship (a bit of 1st and all the 2nd week)
- Summer School course is 4 ECTS, meaning around **110 hours of work** for you
  - We assume you will work in the evenings
  - Grade will depend on your performance in the labs, final pitch and written report.
  - **Be present and on time!**

# Course in Data Intensive Computing Platforms

- "Buzz Words" of the Summer School: **Big Data** & **Big Compute**
  - **Big Data** – a collection of massive amount of information whether structured or unstructured, at rest or in motion
  - **Big Compute** – large scale processing required to extract value from Big Data
- **Machine Learning** and **Predictive analytics** – algorithms to discover patterns and hidden objects implicit in data in order to predict future outcomes or unknown data points
  - Observe how the emerging technology creates new business opportunities
- **Scientific Objective** of this Summer school:
  - Get acquainted with the state-of-the-art technology in the area of Big data analytics: **Systems & algorithms** for massive data



# Course in Data Intensive Computing Platforms (cont.)

- From simple **Map-Reduce programming models** to the state-of-the-art in **stream processing**.
- Two most popular frameworks for Big Data analytics: **Apache Spark** and **Apache Flink**
- Tuesday: **Hadoop Ecosystem**
  - prof. Sameh El-Ansary (Nile University)
  - HDFS and MapReduce programming
- Wed-Thu: **Scala** language and **Apache Spark**
  - Dr. Amir Payberah (Swedish Institute of Computer Science)
- Friday: **Apache Flink**
  - Paris Carbone and Vasiliki Kalavri (KTH)



# EIT Future Cloud Summer School

## Stockholm, June 27- July 8, 2016

|       |       | June 27, 2016                          | June 28, 2016                       | June 29, 2016                              | June 30, 2016                                     | July 1, 2016                                       | July 2, 2016                     | July 3, 2016 |
|-------|-------|--|-------------------------------------|--|---|--|----------------------------------|--------------|
|       |       | Company Presentations                  | Hadoop Ecosystem                    | Apache Spark                               | Apache Spark                                      | Apache Flink                                       | Social event                     | Free Time    |
| 09:00 | 09:30 | Welcome and intro                      | I&E wakeup Session                  | I&E Starter Kit Session<br>Galena Kostoska | I&E wakeup Session                                | Think Global Think China<br>Marie Claire Maxwell   | Bus to Skansen                   |              |
| 09:30 | 10:00 | Keynote<br>Henrik Abramowicz           | Hadoop Ecosystem<br>Sameh Al-Ansary |  | Scala<br>Amir H. Payberah                         |  |                                  |              |
| 10:00 | 10:30 | Keynote<br>Augify                      |                                     |  |   |  |                                  |              |
| 10:30 | 11:00 | Coffee Break                           |                                     |  |   |  |                                  |              |
| 11:00 | 11:45 | Keynote<br>Jacob Zätterström           | Hadoop Ecosystem<br>Sameh Al-Ansary | Scala<br>Amir H. Payberah                  | Spark Streaming and<br>GraphX<br>Amir H. Payberah | Apache Flink<br>Paris Carbone and<br>Vasia Kalavri | Skansen including<br>lunch       |              |
| 11:45 | 12:30 | Introduction of groups                 |                                     |  |   |  |                                  |              |
| 12:30 | 14:00 | Lunch                                  |                                     |  |   |  |                                  |              |
| 14:00 | 15:00 | Company Presentations<br>(4 companies) | Hadoop Ecosystem<br>Sameh Al-Ansary | Apache Spark<br>Amir H. Payberah           | MLlib<br>Amir H. Payberah                         | Apache Flink<br>Paris Carbone and<br>Vasia Kalavri | Segway polo                      |              |
| 15:00 | 15:30 | Quick pitches, Case<br>selection       |                                     |  |   |  |                                  |              |
| 15:30 | 16:00 | Coffee Break                           |                                     |  |   |  |                                  |              |
| 16:00 | 17:00 | Individual sessions with<br>companies  | Hadoop Ecosystem<br>Sameh Al-Ansary | Apache Spark<br>Amir H. Payberah           | MLlib<br>Amir H. Payberah                         | Apache Flink<br>Paris Carbone and<br>Vasia Kalavri |                                  |              |
| 17:00 | 18:00 |  |                                     |  |   |  | Return to Bosön<br>(or freetime) |              |
| 18:00 |       | Social Dinner (BBQ)                    |                                     |  |   |  |                                  |              |

|       |       | July 4, 2016                     | July 5, 2016                                | July 6, 2016                            | July 7, 2016                       | July 8, 2016               |
|-------|-------|----------------------------------|---|---|------------------------------------|----------------------------|
|       |       | I&E                              | I&E   | I&E                                     | I&E                                | I&E                        |
| 09:00 | 10:30 | Pitch training<br>Jenny Lindblad | Business modeling<br>Maria Horelli-Rosenlew | How to start your<br>Business           | Teamwork                           | Company visit at King 10am |
| 10:30 | 11:00 | Coffee Break                     |   |   |                                    |                            |
| 11:00 | 12:30 | Pitch training<br>Jenny Lindblad | Business modeling<br>Maria Horelli-Rosenlew | Teamwork                                | Teamwork                           | Final presentations @SUP46 |
| 12:30 | 14:00 | Lunch                            |   |   |                                    |                            |
| 14:00 | 15:00 | Pitch training<br>Jenny Lindblad | Teamwork                                    | Inspirational talk<br>Boris Nordenström | Pitch rehearsals Jenny<br>Lindblad | Final presentations @SUP46 |
| 15:00 | 15:30 | Teamwork                         |   | Team presentations                      |                                    |                            |
| 15:30 | 16:00 | Coffee Break                     |   |   |                                    |                            |
| 16:00 | 17:00 | Teamwork                         | Team presentations                          | Team presentations                      | Pitch rehearsals                   | Final presentations @SUP46 |
| 17:00 | 18:00 |                                  |   |   |                                    |                            |
| 18:00 |       | Goodbye Dinner                   |   |   |                                    |                            |



Summer School Webpage:

<http://ictlabs-summer-school.sics.se/2016/>

# If you have questions

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