**SIKS Masterclass "Making Sense out of Software Engineering Data"**

*by Prof.dr. Sandro Morasca (Università degli Studi dell’Insubria, Italy)*

**Location**: Vrije Universiteit, Amsterdam, at the Medical Faculty. Room: MF-A311

Entrance: via Van Boechorststraat 7-9, take the elevator to the third floor.

**Date**: Thursday 9th March 2017

**Introduction:**

The course will describe and analyze the techniques that can be sensibly used to extract knowledge out of Software Engineering data acquired via experiments or routine data collection in industrial contexts, to make it practically useful. The course will focus on both conceptual and practical aspects.

From the conceptual point of view, the course will show how to organize data analysis activities. Data analysis techniques will be analyzed, by explaining their preconditions and their outcomes. The course will address both basic, traditional techniques and innovative ones, like those based on Robust Regression or machine learning. Also, it will be explained how the models obtained can be validated.

From the practical point of view, it will be shown how to analyze real-life Empirical Software Engineering data sets by building and executing routines written in the R scripting language. Specifically, it will be shown how to build estimation models for software development effort and for software fault-proneness. The datasets used and the R script will be made available to the attendees, so, it is advised that the attendees install the R environment on their laptops.

The Master class takes half-a day and is aimed at all researchers in the field of Information and Knowledge Systems with a keen interest in research methods and methodology. *Especially SIKS PhD-students are strongly encouraged to participate.*

**Program**

***Masterclass: "Making Sense out of Software Engineering Data" by Prof.dr. Sandro Morasca***

● 12:30 - 13:00  Walk-in and Coffee & Tea

● 13:00 - 13:10  Welcome by Prof. dr. Patricia Lago (VU).

● 13:10 - 14:30  PART 1: Setting the scene for data analysis. Do’s and don’ts.

● 14:30 - 14:45  Break

● 14:45 - 16:15  PART 2: Building estimation models for effort and fault-proneness. Do’s and don’ts.

● 16:15 - 16:30  Break

● 16:30 - 17:00  WRAP-UP & REFLECTION

● 17:00 - 18:00  Drinks

**Registration:**

Participation is free for all SIKS-members (PhD-students and research fellows). However, registration is mandatory. Please, send an e-mail to office@siks.nl and inform Corine that you want to participate.