CALL FOR PARTICIPATION

2nd BSR Summer School on

"Big Software on the Run: Where Software meet Data"

1-6 July, 2018, Berg en Dal, the Netherlands

http://www.3tu-bsr.nl/summerschool2018/

We are pleased to announce the 2nd BSR summer school on "*Big software on the Run – Where Software meet Data*" which will be held in conjunction with the *Eighth European Business Intelligence and Big Data Summer School* (http://cs.ulb.ac.be/conferences/ebiss2018/).

Organized by the three Dutch technical universities (TU Eindhoven, TU Delft, and University of Twente), this cross-disciplinary school gives you the unique opportunity to meet some of the world's leading researchers working on software analytics and process mining related problems and discuss your research with other participants. The summer school is organized in the context of the 3TU.BSR ("Big Software on the Run", http://www.3tu-bsr.nl/) initiative.

The BSR summer school brings together university researchers including master, PhD students and postdoctoral-fellows as well as professionals from industry who are interested in discussing and developing new ideas combining approaches from multiple software analytics related disciplines.

We are pleased to announce the following confirmed speakers. The list will be updated as more speakers confirm:

- **Stephan Diehl, University of Trier, Germany**
- **Boudewijn van Dongen, Eindhoven University of Technology, the Netherlands**
- **Holger Hermanns, Saarland University, Germany**
- **Gerald Lüttgen, University of Bamberg, Germany**
- **Jaco van de Pol, University of Twente, the Netherlands**
- **Anne Rozinat, Fluxicon, the Netherlands**
- **Alexander Serebrenik, Eindhoven University of Technology, the Netherlands**
- **Sicco Verwer, Delft University of Technology**

The school is organized in close collaboration with SIKS, ASCI and IPA and will run from Sunday 1st to Friday 6th July, 2018. The venue is Fletcher ParkHotel Val Monte, Berg en Dal, the Netherlands.

SCOPE AND GOAL

Software systems have grown increasingly large and complex in today's highly interconnected world. Communication, production, healthcare, transportation and education all increasingly rely on "Big Software". This increasing dependence makes reliable software systems a major concern and stresses the need for effective prediction of software failures. Since software is evolving and operates in a highly dynamic and changing environment, it becomes difficult if not impossible to anticipate all problems at design-time.

Within the BSR research program (http://www.3tu-bsr.nl/) that has started in 2015, we propose to shift the main focus from a priori software design to a posteriori software analytics, thereby exploiting the large amounts of event data generated by today's systems. The core idea is to study software systems in vivo, i.e., at runtime and in their natural habitat. We would like to understand the actual behavior of software, to detect and predict future violations (e.g. deviations from some normative model, privacy and security constraints, etc.) and to provide insightful recommendations for software engineering related tasks (e.g. development, testing, debugging, configuration, etc.). This paradigm shift requires new forms of empirical investigation that go far beyond the common practice of collecting error messages and providing software updates. Novel techniques in process mining, visualization, security, feedback, and analytics are being developed within a joint collaboration between the three technical universities.

The aim of the BSR summer school is to bring together researchers, industry professionals and students to work on a multi-perspective and interdisciplinary understanding of the current problems and challenges related to *in vivo* software analytics concepts and practices. The school will cover software and data analytics related topics. Lectures are combined with hands-on sessions that will help participants to understand theoretical principles and how to apply them.

SCHEDULE

This five-day event (Monday to Friday) will consist of:

- Sessions by some of the top researchers and industry professionals in the field.
- Sessions by senior researchers working on the BSR project.
- Hands-on sessions on novel methods and techniques for BSR.
- Poster sessions and discussion on BSR related topics and their future.
- PhD presentation sessions

A preliminary schedule can be found at http://www.3tu-bsr.nl/summerschool2018/program

VENUE:

The BSR summer school will be held at Fletcher ParkHotel Val Monte, Berg en Dal, the Netherlands (https://www.parkhotelvalmonte.nl/) where all speakers and students will be

accommodated. Berg en Dal, clamped between Maas and Waal, is one of the most beautiful municipalities in the Netherlands. Berg and Dal is attractive with an overwhelming landscape, rich cultural history and special wine-growing. The big altitude differences, from which Berg and Dal are named, provide beautiful views.

APPLICATION:

Qualified candidates should pre-register before **April 1ˢᵗ 2018.** Accepted participants will receive, within 15 working days after the pre-registration, an email with information about the payment of the registration fee**. The registration fee is 600€** and covers the following costs:

- Accommodation costs for 5 nights (arrival on Sunday, October 23 afternoon) at Fletcher ParkHotel Val Monte.
- Meal costs for 5 days (Breakfast, lunch and dinner) excluding drinks during the dinners
- Participation in sessions
- Social events (e.g. welcome party, excursion, etc.)

For more information please visit http://www.3tu-bsr.nl/summerschool2018/registration

SCHOOL DIRECTORS

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