

Newsletter



Participants of 4th Swiss Conference on Data Science at Kursaal Bern.

2nd Member Newsletter

Welcome to the second member newsletter. This time you can read about the events of two very active expert groups and a recap about a very successful 4th Swiss Conference on Data Science, which took place in June 2017 in Bern. Please also note the very important news from the alliance at the beginning of this newsletter.

The editorial team is still ramping up, and we are looking for co-editors of the newsletter. If you are interested, please reach out to us at editors@data-service-alliance.ch.

Happy reading! The Editors

PS: This newsletter is optimised for on-thebeach reading. Happy summer vacations!

News from the Alliance

THE EDITORS

The Board of the Alliance likes to inform its members about the following recent matters.

Change in the office On health grounds, Gerold Baudinot has stepped down as managing director of our alliance with effect of July 27, 2017. We are very sorry that this step has been necessary. We wish Geri all the best on his way to recovery, and are tremendously thankful for all his contributions to Data+Service

and the great job he did as MD, not least in organising SDS | 2017. We are looking forward to collaborating again in the future, in whatever other role.

Educational Program The educational program offered by the alliance is steadily increasing. Recent additions to the program include courses in the realm of Data Science offered by FH Bern. Please take a minute to check the current offerings at https://www.data-service-alliance.ch/education. Please note that the course fees can be paid via Industry Member's Flex-Budget.

Expert Groups At the moment the alliance has seven active expert groups. Institutional members are invited to participate in these groups, or even consider creating new expert groups to connect with their peers. The alliance is financially funding these expert groups to enable e.g. the invitation of external experts or networking events. Please talk to Gerold Baudinot for details.

SDS | **2017** The 4th Swiss Conference on Data Science took place on June 16, 2017. With 250 participants and a full program the conference was a big success for our alliance.

The board likes to thank the organising committee (Gerold Baudinot, Melanie Imhof and Amrita Prasad) for their immense efforts and professionalism in planning and running this conference!

General assembly 2017 This year's General Assembly of Data+Service will be held on the late afternoon of Thursday, November 16, 2017, either in Zurich or Bern. Please save the date. If you can contribute a meeting room, please get in touch.

Expert Group: Predictive Maintenance

GABRIEL MICHAU

The last Predictive Maintenance Expert Group meeting took place at the Winterthur campus of the ZHAW on June 15, 2017. For a whole afternoon, over 30 experts from 17 companies attended to three presentations, followed by a more casual discussion.

The afternoon started with a presentation of *Mind-Sphere*, a platform developed by Siemens, followed immediately by the presentation of *Predix*, its counterpart developed by GE. These platforms are aiming at providing state-of-the-art solutions for making the most of the Internet of Things (IoT). Both are Platform-As-a-Service and rely on three layers:

The first layer provides standards and optional connection devices for collecting and transferring data from monitored systems to cloud based operating systems. (MindConnect and Predix Machine).

The second layer offers access to various cloud infrastructure and an interface for app development (Mind-Sphere and Predix Cloud).

Finally, off-the-shelf apps and analytics are proposed for data analysis (MindApps and Predix Marketplace).

With the choice of open-source systems, the creation of a multi-sourced and rich ecosystem for accelerated development of IoT applications are encouraged.

The third and last presentation, given by *Altran*, focused on new applications for the Internet of Things, with a case study on the connected operator. Challenges in such applications arise in particular from the difficulty to identify the best end-to-end chain of processes and technologies: sensors, connectivity, data management and applications. To highlight such process, Altran demonstrated a connected suit that monitors in real time health indicators related to the posture and movements performed by an operator.



As usual, the afternoon finished on a more informal touch, creating opportunities for further discussions on the presentations, case studies and some fresh drinks.

Gabriel Michau is a Research Associate at ZHAW at the Institute of Data Analysis and Process Design. Gabriel is a member of the Predictive Maintenance Expert group and is involved in organising the events.

Expert Group: Data Ethics

THORSTEN BUSCH

Data ethics is like teenage sex: Everybody claims they're doing it, but actually, everyone is pretty clueless about it and just trying to figure it out as they go. Our group wants to change that, so we are bringing together scholars and business practitioners from all over Switzerland to discuss ethical issues arising from Big Data business models, artificial intelligence, machine learning, and a whole host of other related phenomena.

As a starting point, we recently had the pleasure of hosting Prof. Dr. Christian Hauser (HTW Chur) at an event in Zurich, where he was so kind as to introduce to us the new SATW study "Big Data: Ethical challenges for companies", of which is he is the lead author. The study will be officially launched this summer and discussed publicly during the Digitalfestival in Zurich on September 14 (Info & Registration¹).

In addition to our regular group events, we also cooperate with the Lassalle Institute to host a symposium on Big Data, labor, and leadership. The symposium will take place in Bad Schönbrunn on November 23, and it will feature a keynote by Prof. Dr. Viktor Mayer-Schönberger (Oxford Internet Institute, University of Oxford).

 $^{^{1}} http://www.satw.ch/en/digitalisation/detail/content/show/Publication/ethische-herausforderung-von-big-data$

If you would like to join this group, please feel free to contact Christoph Heitz (heit@zhaw.ch) or Thorsten Busch (thorsten.busch@unisg.ch).

Thorsten Busch is a Senior Research Fellow at the Institute for Business Ethics at University of St. Gallen. Together with Christoph Heitz he organises the Data Ethics Expert Group.

Recap: SDS12017 & Use Case Talks

THE EDITORS

On June 16, 2017 the 4th edition of the Swiss Conference on Data Science (SDS | 2017), presented by D | ONE, took place at the magnificent Kursaal Bern. 250 participants and 29 talks, organised in four tracks plus two interactive parallel sessions, made this the biggest SDS conference so far. With its national and international speakers, from academia and industry, once again SDS provided its participants an opportunity to hear about advances in the field of data science and to discuss about the latest developments. A very nice review of the conference by Thilo Stadelmann, the general chair of SDS 2017, can be read here². As in the previous years, videos and slides of almost all talks are available online www.data-servicealliance.ch/sds2017. We warmly invite the reader to take a look at this repository. Videos of former SDS conferences are also available on the youtube channel of ZHAW Datalab³.

As a novelty to this year's SDS conference, parallel sessions in the style of so called *use case talks* took place. The aim of this new format was to foster in-depth technical discussions and the exchange about an interesting, technical data-topic among organisations and SDS partic-

In total five organisations presented their use cases. Insurance company *Helsana* discussed the challenging endeavours of building hardware infrastructure for analytical purposes. Online marketplace eBay was interested in identifying users with specific domain expertise, as well as how to get better insights about the quality of products offered in the platform. Internet service provider SWITCH, in cooperation with ZHAW, discussed the challenges of managing optimised computating clusters and presented a distributed computing framework solution. Retailer *Valora*, who is maybe best known for its brand *k* kiosk, presented their challenges in demand forecasting in high-frequency retailing. And last but not least professional service firm PwC presented their machine learning approach for correcting erroneous transactional data from corporate tax statements.

In a relaxed atmosphere, with a marvellous view over Bern, roughly 40 participants intensely brainstormed possible path ways towards solutions to the manifold presented problems. At the end of the sessions, all participants agreed that the use case talks were quite rewarding for both sides: presenting organisations and SDS participants. In this sense, it's not only worth looking forward to SDS | 2018, but also to a (hopefully) next edition of use case talks.

Industry 4.0

CHRISTOPH HEITZ

In cooperation with ZHAW and Industrie2025, we are organising a conference on Industrie 4.0 on September 6, 2017 in Winterthur.

The conference is entitled "Perspektiven mit Industrie 4.0 - Chancen für Schweizer KMUs". It is focused on successful implementations of ideas in the area of Industrie 4.0. and it showcases concrete advances in this field. We could organise a good panel of speakers, and I am sure that this conference will be great oppor-

tunity to learn from concrete examples, and to get inspiration and starting points for your own innovation initiatives.

Especially interesting for companies: representatives from different research funding agencies will be present and help you to get specific information on funding options for innovation projects. There is money around to help Swiss companies move forward on the path of Industrie 4.0 – don't miss these opportuni-

www.perspektiven-i40.ch.

Note that members of the Swiss

More information can be found at

Alliance for Data-Intensive Services get a 30% discount on the conference fee. In addition, industrial members may use their Flex Budget for covering the registration fee.

Christoph Heitz is Professor at the Institute for Data Analysis and Process Design at ZHAW. He serves as President of the Swiss Alliance for Data-Intensive Services.

²https://blog.zhaw.ch/datascience/conference-review-of-sds2017-kursaal-bern-june-16/

³https://www.youtube.com/channel/UCsqcGDL1LfabkIviVXbwkTA

Zurich, August 2, 2017

Forthcoming

05.09.2017 - Conference

Smart Maintenance Conference
http://smartmaintenance.ch/

06.09.2017 - ConferencePerspektiven mit Industrie 4.0
https://perspektiven-i40.ch

07.09.2017 - ConferenceAI in Industry and Finance https://www.zhaw.ch/iamp/industrial-mathematics

16.11.2017 - General Assembly General Assembly. Details will be announced in due time.

Impressum

Editors: Alexander Grimm, René Pfitzner

Contact: editors@data-and-service.ch

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