



Autumn Semester 2020 Highlights

As the semester is coming to an end and student life reverts to exam preparation, it is time for us to step back and rewind the past months. The ongoing outbreak of the coronavirus has struck our daily life with repeated full force, and we hope all of you are safe and healthy. We want to thank all of our partners for their continuous support, despite challenging times.

Even though campus life was first run in a hybrid mode with both virtual and in-person teaching and later was forced to switch online only, we developed alternative ways to provide students with insights through virtual data science meetups and virtual events. Let's have a look at the highlights grouped into our three pillars: **Learn. Connect. Execute.**

LEARN.

We foster the exchange of analytics-related knowledge among students by organising community events and talks with leading experts from academia and industry.

Academia to Industry

We kicked off the HS20 semester with our Academia to Industry event, this time via Zoom. We brought together Professor Afonso Bandeira (DMATH) and Sarah Gadd (Credit Suisse) to talk about the differences between Data Science in academia and industry. Their presentations focused on the role mathematics plays in data analysis challenges and how it can be useful when intuition fails, especially in community detection in networks ("Statistics and Computation in Network Problems") and how to use ML to comply with regulations within operational risk ("Deep Learning & Accelerating the NLP Journey in the Unstructured World"). The recording of Prof. Bandeira's presentation is available on [our YouTube Channel](#).

Data Science Meetups

The shift to Zoom this semester allowed us to host DS Meetups with speakers outside of Switzerland, further diversifying our talks this semester. Members learned about the detection of extreme weather events with deep learning, robust and reliable machine learning, as well as the detection of deforestation





with satellite imagery. In order to give our members insights into possible career paths we once again hosted our popular “ACE meets Alumni” Q&A where current members got the chance to talk to three ACE alumni that now work at Microsoft Research, Revolut and Visium. In order to help our members to get their dream job, we hosted another meetup with specific advice on how to apply for PhD and Industry positions. The amazing speakers that made this possible are listed below:



Lukas
Kapp-Schwoerer



André
Graubner



Mélanie
Bernhardt



Renato
Durrer



Francesco Paolo
Ducci



Dr. Alexander
Ilic



Dr. Yannick
Misteli



Marc
Fischer



Patrick
Henriksen



Dr. Jan Dirk
Wegner

In case you missed any of our DS meetups or want to rewatch them, feel free to browse our [new official YouTube page](#).

CSCS Field Trip

Early October, we had the opportunity to be the first group to visit the Swiss Supercomputing Center (CSCS) since the beginning of the pandemic. After an early start, we arrived at the CSCS premises in Lugano where we were warmly greeted. After a nice introductory talk about the center, we got the chance to see and learn more about the supercomputers such as Piz Daint. We even got to meet Euler, the famous ETH supercomputer! It was an extremely interesting day trip.





CONNECT.

At our workshop and networking events we link our corporate partners with the greatest talents in the field of analytics.

QuantumBlack Kedro Workshop Event

In October we partnered up with QuantumBlack to host a virtual workshop in which our members learnt how to use Kedro - an open source library built by QuantumBlack that should help to develop more efficient data science projects. After Laís Carvalho gave us a Kedro introductory presentation Tam-Sanh Nguyen was tasked to walk us through the practical part. By answering questions including technical ones on the fly and in a fun and engaging manner they raised future expectations beyond what was thinkable of such Zoom workshops.

Visium Workshop Event

That machine learning can also be used for more fun tasks was interactively shown by Visium's Pelayo Choya Carreter and Guillaume Mollard. Their showcase "DirtyGANcing" takes a person's look and generates a video of them dancing like a reference dancer. In addition to the cool outputs, how generative adversarial networks can be applied to computer vision and other fields was discussed, as well as how Visium uses machine learning in their day-to-day workstreams.

AWS Events

We had the pleasure of not only hosting one but two events with AWS (Amazon Web Services). The attendees were able to learn about AWS' history and mission in terms of providing machine learning resources in the cloud and the worklife. Job roles, the recruiting and how innovation is preserved even at a large company were further discussed. The workshop focused on demoing and using useful tools such as SageMaker to deploy and maintain ML models. Tasio Guevara also shared how ready-made utilities like Amazon Comprehend and Amazon Recognition can be applied to various real-life challenges.

Credit Suisse QAT and Data Science Workshop Events

In the end of October Credit Suisse's QAT (Quantitative Analysis and Technology) team invited our members to a unique series of interactive workshops introducing their four data-driven divisions. Our members received a rare glimpse into how one of Switzerland's top banks models credit risk, counterparty portfolio, non-maturing products just to name a few.





In a more core data science focused interactive workshop, our members had the chance to work in small teams and with Credit Suisse DS experts on a challenge revolving around ESG & eco-friendly investments and hence to get a feeling of what can be done with DS in the financial industry. Once the small competition was over, the participants got the chance to talk with a vast panel of CS collaborators to learn more about Credit Suisse and about the use of data in finance.

EXECUTE.

We leverage our domain knowledge by organising competitions and events to put our members' data science skills into practice.

Hack4Good

Hack4Good, our program organised in collaboration with the ETH Student Project House kicked off its third edition in September. It pairs students in analytical disciplines from universities in Zurich with non-profit organisations across Europe to drive impact through a targeted 8-week data science project. Even though we started off in-person, due to COVID-19, this edition was largely online. Nevertheless, we had a great edition that was filled with a lot of fun, data science and hopefully long-term impact for the participating non-profit organisations. We had everything from hack days in-person (when it was still possible), to online workshops on agile methods and pitching from great workshop holders.

We would like to especially thank all the non-profit organisations as well as the participants who made this edition possible! If you are curious, please have a look at the recording of the final event on [YouTube!](#)

