

Week 1 at ZHAW School of Engineering, Winterthur, Switzerland / Module “Data engineering”/ Location: TH 561 / TH 567

Date Time	Saturday June 28th	Sunday June 29th	Monday June 30th	Tuesday July 1st	Wednesday July 2nd	Thursday July 3rd	Friday July 4th	Saturday July 5th	Sunday July 6th
8 - 9 am	Arrival of US-guests: 8am • Transfer to Hostel for luggage storage	no breakfast organized	7:45 am Patricia picks up the US-guests at the Hostel 8 am Breakfast US-guests at Migros Rest. Neuwiesen	Breakfast for US-guests at Migros Restaurant Neuwiesen	Breakfast for US-guests at Migros Restaurant Neuwiesen	Breakfast for US-guests at Migros Restaurant Neuwiesen	Breakfast for US-guests at Migros Restaurant Neuwiesen	short Breakfast for US-guests at Migros Restaurant Neuwiesen (maybe take-away?)	Breakfast at Berggasthaus Ebenalp and Check-out
9 am - 12 pm	• Free time in Winterthur e.g. swimming pool Töss • Check in (Hostel Depot195, ready at 4 pm) • Free evening time e.g. Albani festival	Free time in the morning and noon	9 - 9:30 am (heug) TH 561: Welcome Presentation (doem) Lecture: - The Data Science-Process - Elements of Exploratory Data Analysis Lab: - Development Environment - The Python Data Science stack	(gerj, fues) Lecture: Data Aquisition & Storage - APIs (REST, GraphQL...) - Web Scraping - Data Storage Lab: - Web scrapping with scrapy	(fues) Lecture: Data Preparation - Data Cleaning - Data Integration - Feature Engineering Lab: - Data Cleaning - Feature Engineering	(fues) Lecture: Data Pipelines and Workflow Orchestration - Data Pipelines and Workflow Orchestration Lab: - Pipeline tutorial	Voluntary excursion to Zurich with Patricia	Excursion Rhine Fall & Alpstein Mountain Range Jonathan: Pick-up lunch-packages at Bäckerei Kuhn (Untertor) for all 8:30 am - Meeting point: Archstrasse/ Lagerhausstrasse Tour guides: Jonathan 8:40 am Coach departure	A short or longer hike in the Alpstein with the group or smaller individual groups. Decide spontaneously depending on the weather. Individual train tickets for the journey home will be provided Train ride from Wasserauen to Winterthur
12 pm lunch		no lunch organized	Lunch Mensa (with Manuel, voucher for US-guests)	Lunch Mensa (voucher for US-guests)	Lunch Mensa (voucher for US-guests)	Lunch Mensa (voucher for US-guests)	no lunch organized	9:40 am Boat trip Rhine Fall Visit Laufen Castle	no lunch organized
1 - 5 pm		Start Summer School with CH-/US-students 3:50 pm Meeting point with Patricia: "Stadtter Winterthur" in front of large staircase Train transfer to Patricia's place	(doem, fues) Data Science Project Introduction and Selection of Project(s) Project Work - Project Charta - Data Management - Exploratory Data Analysis	Guest Talk/Tutorial , Marcel Neidinger, AWS (fues, saxr) Data Science Project - Project work in groups and individual supervision	(fues, doem) Data Science Project - Project Work - Data Management - Data Report	Project Pitches (doem, fues, wele, saxr) Data Science Project - Project work in groups and individual supervision - Project plan and status presentations	1pm Technical excursion to Kistler 4 pm start frack parade and night of technology at ZHAW SoE	Lunch (lunch-packages) Coach transfer to Alpstein 3:30 pm Guided Tour "Wildkirchli / Äscher" Check-in Berggasthaus Ebenalp	Free time in the afternoon
5 - 8 pm dinner		Bring your swimwear if you like Dinner	Individual dinner for US-guests at Migros Restaurant Neuwiesen	6 pm Dinner for US-guests + CH-students at Restaurant Obergass	Individual dinner for US-guests at Migros Restaurant Neuwiesen	Individual dinner for US-guests at Migros Restaurant Neuwiesen	Dinner for US-guests + CH-students at night of technology SoE (food stands vouchers)	6 pm Dinner at Berggasthaus Ebenalp	no dinner organized
Night	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195	Berggasthaus Ebenalp	US-guests Hostel Depot195

Week 2 at ZHAW School of Engineering, Winterthur, Switzerland

Module “Machine Learning” / Location: TH 561 / TH 567

Date Time	Monday July 7 th	Tuesday July 8 th	Wednesday July 9 th	Thursday July 10 th	Friday July 11 th	Saturday July 12 th	Sunday July 13 th
8 - 9 am	Breakfast for US-guests at Migros Restaurant Neuwiesen	Breakfast for US-guests at Migros Restaurant Neuwiesen	Breakfast for US-guests at Migros Restaurant Neuwiesen	Breakfast for US-guests at Migros Restaurant Neuwiesen	no Breakfast for US-guests organized (buy individually at a bakery or Coop railway station)	US-guests: Check-out Hostel Depot 195	CH-students: Meeting with Jonathan Fürst at GVSU Campus, USA
9 am - 12 pm	(doem) Lecture: Supervised Learning: - Regression - Classification - Evaluation Lab: Supervised Learning using the Python Stack	(wele) Lecture: Association rules and recommender Systems Lab: Recommender systems using the Python Stack and the teachable machine	(gerj, saxr) Data Science Project: - Project work in groups and individual supervision	(doem, saxr) Data Science Project - Project work in groups and individual supervision	Excursion Berne Tour guide: Patricia 7:40 am Meeting point with Patricia: "Stadttor Winterthur" in front of large staircase 07:54 am Train to Berne 10:30 - 11:30 am Guided tour of the Parliament Building (1h) passport / ID mandatory Pick-up lunch-packages at bakery in Bern Lunch at Rosengarten or Marzili Zytglogge Tour (1h) - 2:15 pm: Group 1 - 4:15 pm: Group 2 Free time in Berne city 5:30 pm Farewell Dinner at Restaurant Altes Tramdepot 7:44 pm Return trip to Winterthur	Breakfast for US-guests at Migros Restaurant Neuwiesen? (depending on flight schedule) whole group: Transfer to Allendale (MI), USA	
12 pm lunch	Lunch Mensa (voucher for US-guests)	Lunch Mensa (voucher for US-guests)	Lunch Mensa (voucher for US-guests)	Lunch Mensa (voucher for US-guests)			
1 - 5 pm	(doem) Lecture: Unsupervised Learning - Clustering - Anomaly Detection - Evaluation Lab: Unsupervised Learning using the Python Stack	(gerj, saxr) Data Science Project: - Project work in groups and individual supervision	(wele) Data Science Project - Project work in groups and individual supervision	(doem, fues, wele) Data Science Project - Project work in groups and individual supervision - Project Status Updates and Discussions			
5 - 8 pm dinner	Individual dinner for US-guests at Migros Restaurant Neuwiesen	6 pm Dinner for US-guests at Restaurant Obergass, Schulgasse 1	6 pm Dinner for US-guests + CH-students at Restaurant Sonne, Marktgassee 13	Individual dinner for US-guests at Migros Restaurant Neuwiesen			
Night	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195	US-guests Hostel Depot195		