

Applied Data Analysis

Monday 12th August		
Time	Session	Speakers
09:00-10:00	Opening Keynote	
10:00-10:30	Refreshment break	
10:30-12:00	Introduction to Applied Data Analysis * Presentation of the strand, objectives and schedule * Introductions * Example of a data analysis application * Setting up systems	Sven Najem-Meyer Paul Guhennec
12:00-13:30	Lunch	
13:30-15:30	Introduction to Pandas Intro to Pandas: data types (series, dataframes) Data loading Data access (indexing)	Sven Najem-Meyer Paul Guhennec
15:30-16:00	Refreshment break	
16:00-17:00	Exercises and catching-up session attendees may pick one from the options below: Catching-up: assistance is provided to clarify any issue from the previous classes or in setting up your Python environment. Exercises/project: exercises or mini-projects will be provided for practice. <ul style="list-style-type: none"> Alternatively, attendees can bring their own mini-project to the class and work on it, individually or with others. 	Sven Najem-Meyer Paul Guhennec
Tuesday 13th August		

Time	Session	Speakers
09:00-10:30	<p>Tidy data (part I)</p> <p>Basic concepts of (proper/tidy) data modelling</p>	<p>Sven Najem-Meyer</p> <p>Paul Guhennec</p>
10:30-11:00	Refreshment break	
11:00-13:00	<p>Tidy data (part II)</p> <p>Manipulating data with Pandas</p> <p>* Operations on tidy data frames:</p> <ul style="list-style-type: none"> - set, union join - select, apply transform 	<p>Sven Najem-Meyer</p> <p>Paul Guhennec</p>
13:00-14:30	Lunch	
14:30-15:30	<p>Exercises and Catching-up</p> <p>Catching-up</p> <p>Work on exercises/mini-projects</p>	<p>Sven Najem-Meyer</p> <p>Paul Guhennec</p>
15:30-16:00	Refreshment break	
16:00-17:00	<p>OPTIONAL ATTENDANCE</p> <p>Enriching Exhibition Stories with Quire (Part 1)</p> <p>Quire is an open-source software project developed by Getty for authoring rich exhibition-centric digital outputs which are easy to write, build, deploy and maintain, including by smaller institutions and individuals.</p> <p>The AHRC-funded Enriching Exhibitions Stories project has extended Quire to incorporate structured Linked Art data alongside novel forms of digital analysis.</p> <p>In preparation for Thursday's hands-on session, the project team will introduce the Quire software and demonstrate its use in digital stories based on the Ashmolean Museum's acclaimed 2023 exhibition Labyrinth: Knossos, Myth and Reality.</p>	<p>Kevin Page, Tyler Bonnet, Erin Canning - University of Oxford e-Research Centre</p> <p>Aruna Bhaugeerutty, Andrew Shapland - Ashmolean Museum</p>

Wednesday 14th August		
Time	Session	Speakers
09:00-10:30	Exploratory Data Analysis (part I) Basic plotting Descriptive statistics Variation, distributions	Sven Najem-Meyer Paul Guhenec
10:30-11:00	Refreshment break	
11:00-13:00	Exploratory Data Analysis (part II) Descriptive statistics and plotting with Pandas, Matplotlib and Seaborn Data modelling: working with texts	Sven Najem-Meyer Paul Guhenec
13:00-14:30	Lunch	
14:30-15:30	Exercises and catching-up Catching-up Work on exercises/mini-projects	Sven Najem-Meyer Paul Guhenec
15:30-16:00	Refreshment break	
16:00-17:00	Details TBC	
Thursday 15th August		
Time	Session	Speakers
09:00-10:30	Applied Data Analysis (part I) Explorative data visualization Primer on good and bad data visualization practices	Sven Najem-Meyer Paul Guhenec
10:30-11:00	Refreshment break	

11:00-13:00	Applied Data Analysis (part II) Geo-Mapping	Sven Najem-Meyer Paul Guhennec
13:00-14:30	Lunch	
14:30-15:30	Exercises and Catching-up Catching-up Work on exercises/mini-projects	Sven Najem-Meyer Paul Guhennec
15:30-16:00	Refreshment break	
16:00-17:00	OPTIONAL ATTENDANCE Enriching Exhibition Stories with Quire (Part 2) Continuing on from Tuesday's introduction, the Enriching Exhibition Stories team will guide attendees during this hands-on session. Through structured exercises, participants will install and run Quire, then design and implement their own digital story drawing upon Linked Art compatible collections.	Kevin Page, Tyler Bonnet, Erin Canning - University of Oxford e-Research Centre Aruna Bhaugeerutty, Andrew Shapland - Ashmolean Museum
Friday 16th August		
Time	Session	Speakers
09:00-10:30	Applied Data Analysis (part III) (Social) network analysis Constructing datasets for research	Sven Najem-Meyer Paul Guhennec
10:30-11:00	Refreshment break	
11:00-13:00	Publishing datasets & communicating results Communicating data analysis results Best practices about publishing datasets, licensing issues, reproducibility, data repositories	Sven Najem-Meyer Paul Guhennec

13:00-14:30	Lunch	
14:30-15:30	Questions and Open Discussion	Sven Najem-Meyer Paul Guhenec
15:30-16:00	Refreshment break	
16:00-17:00	Closing keynote	Nanna Bonde Thylstrup