

Day 1: Welcome to Political Data Science Hackathon!

Solveig Bjørkholt

27. June 2022

What to expect from this course



- Introduce some basic data science skills
- Demonstrate how to work effectively in cross-disciplinary teams
- Give an opportunity to learn and produce something worklife related

Who are we?

Solveig Bjørkholt (PhD in political science)

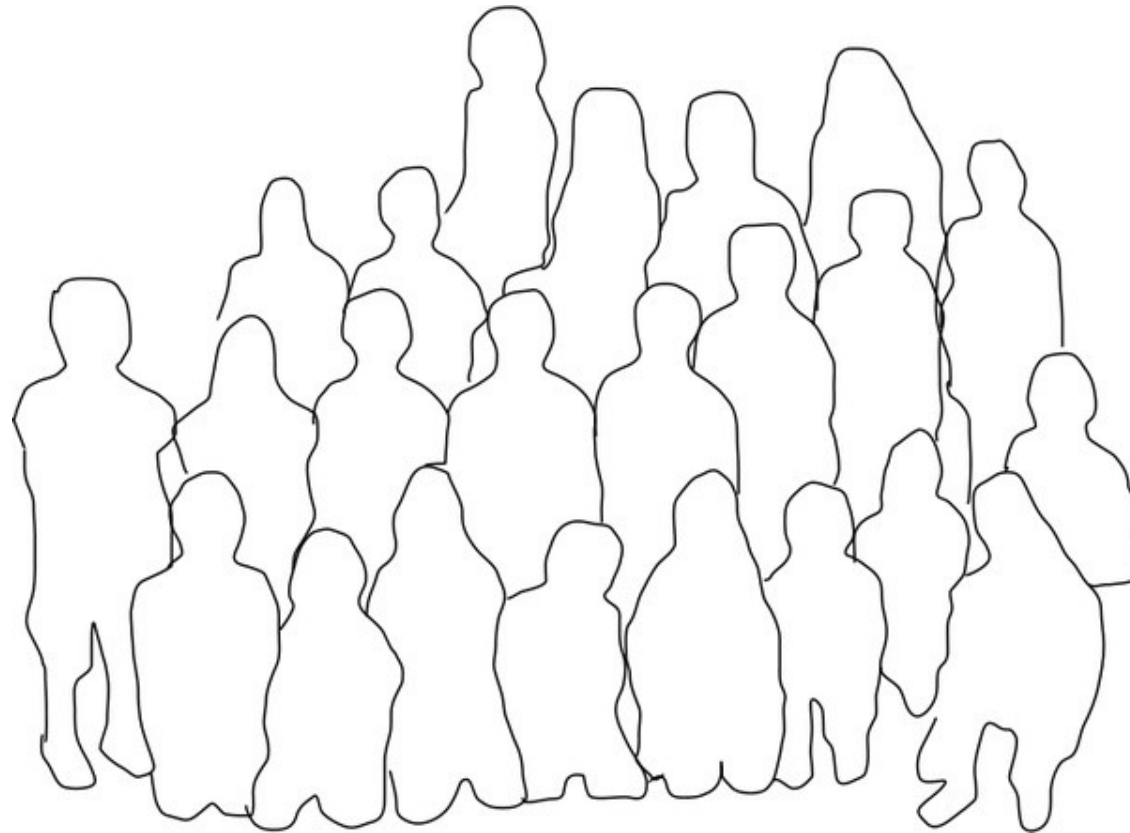
Sondre Elstad (PhD in economics)

Alex Moltzau (AI Policy and Ethics at NORA)



Who are you? :)

- What's your name?
- What do you study?
- Have you used any R before?
- What would you like to get out of this course?



What is a hackathon?

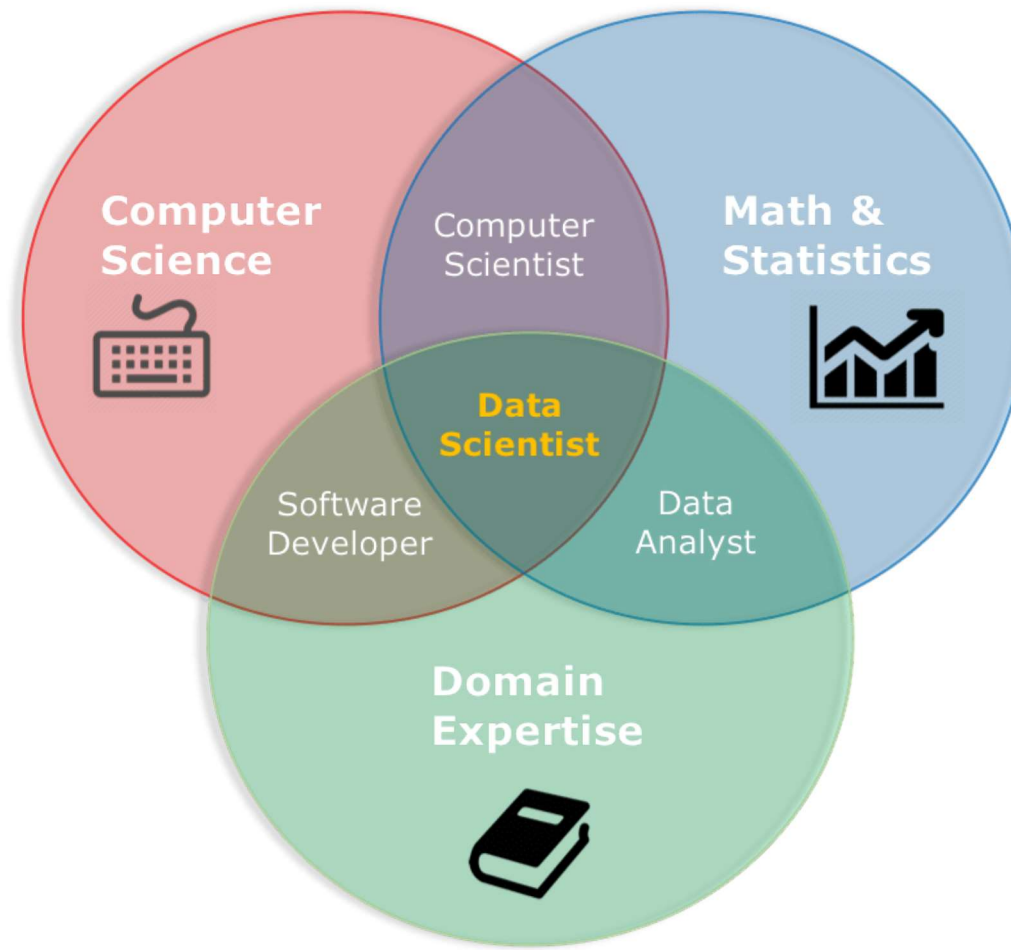
- Hacking: Problem solving
- An event where people come together for a set duration of time to solve problems.

Kind of like a festival!



What is “political data science”?

Political science: Domain knowledge about power relations, institutions and broad analytical skills for studying social phenomena.



Course material

- [Main course material](#)
- R for Data Science
- Storytelling with data
- Text mining with R
- Machine Learning for Social Scientists

But consider these *learning resources* rather than syllabus. The goal here is to learn through creating, so use these resources to look up things you wonder about rather than read them from A to Z.

Course overview

- Week 1: Team work, Github, R, RStudio and R Markdown. Presentations from stakeholders.
- Week 2: Data gathering and visualization.
- Week 3: Text analysis.
- Week 4: Machine learning.
- Week 5: Machine learning, iterative work, deployment and IT communication.
- Week 6: Finishing projects and final presentations.

The “final exam”

1. An R Markdown report exploring the case (optionally including a dashboard)
2. A Github repository with reproducible code
3. A team presentation at the **4th of August** for the stakeholders and others



- The course ends with a pass/fail grade.
- And a reward for the winner team.

The one-up awards

- We are a very diverse group in terms of backgrounds, programming competencies and so forth
- To capitalize on that, we need to help each other out

The **one-up awards**: Two awards to the two students who make a particular effort to help others out.



Location location

Monday 27. June to Wednesday 13. July (week 1, 2 and 3)

Monday 18. July to Thursday 4. August (week 4, 5, and 6)

Cases and stakeholders

Case descriptions can be found in [Canvas](#).

- **SSB:** How can we contribute to better official statistics using webscraping to create an indicator of statistical quality from the “About the statistics” part on www.ssb.no?
- **NORAD:** How can we use classification algorithms to discover whether an aid agreement also contributes to reduction of greenhouse gas emissions?
- **UNA (FN-sambandet):** How can we use the *storingscrape* API to explore the political effect of UNA?
- **OAG (Riksrevisjonen):** How can we use various data sources on health statistics to map the efficiency and quality of the Norwegian health care system?
- **OPX:** How can we use various data sources on NGOs to create a product that maps the most efficient and robust NGOs for investors?

Group 1: Statistics Norway

Group 1 - SSB

1	Abdullah Mohamed Reda Almudaffar	Faculty of Mathematics and Natural Sciences	Robotics (Informatics)	Bachelor
2	Beate Solstrand Baklund	Faculty of Social Sciences	Political Science	Bachelor
3	Tyra Larsdatter Grasmø	Faculty of Social Sciences	Sociology	Bachelor
4	Vera Erikstad Rutherford	Faculty of Mathematics and Natural Sciences	Mathematics with Informatics	Bachelor
5	Nora Christina Lokken	Faculty of Social Sciences	Master of Economics (2-year)	Master
Case	SSB: Webscraping, structuring, automated program			

Group 2: NORAD

Group 2 - NORAD

1	Eira Henden Nybakk	Faculty of Social Sciences	Political Science	Bachelor
2	Nora Didriksen	Faculty of Social Sciences	Political Science	Bachelor
3	Nikolai Elias Koop	Faculty of Mathematics and Natural Sciences	Informatics: Digital Economics and leadership	Bachelor
4	Oda Strand Marchand	Faculty of Humanities	European languages - Russian language	Bachelor
5	Kasim Sadikovic	Faculty of Mathematics and Natural Sciences	Mathematics	Bachelor
Case	Norad: Data collection, text analysis, classification			

Group 3: FN-sambandet

The United Nations Association of Norway

Group 3 - FN-sambandet

1	Markus Annæus Austreim Opheim	Faculty of Social Sciences	Samfunnsøkonomi (bachelor)	Bachelor
2	Hannes Bräuer	Faculty of Social Sciences	Peace and Conflict Studies	Master
3	Andreas Lind Kroknes	Faculty of Social Sciences	Master program Political Science/Statsvitenskap - Master	Master
4	Gard Olav Dietrichson	Faculty of Social Sciences	Political Science	Master
5	Jørn Lager Lyngås	Faculty of Social Sciences	Sosialantropologi	Bachelor
Case	FN-sambandet: API, data structuring			

Group 4: Riksrevisjonen

The Office of the Auditor General of Norway

Group 4 - Riksrevisjonen

1	Xhensila Kllogjeri	Faculty of Social Sciences	Samfunnsøkonomi	Bachelor
2	Christine Diane Malaca Morte	Faculty of Law	Master i rettsvitenskap	Master
3	Izolda Vlasova	Faculty of Social Sciences	Samfunnsøkonomi	Bachelor
4	Anton Kristian Bugge	Faculty of Social Sciences	Political Science	Bachelor
5	Hedvig Signy Monsen Kristoffersen	Faculty of Social Sciences	Master in Economic Theory and Econometrics	Master
6	Willem Ofstad	Faculty of Social Sciences	Master of Economic Theory and Econometrics	Master
Case	Riksrevisjonen: Data collection, exploratory analysis			

Group 5: Oslo Philanthropic Exchange (OPX)

Group 5 - OPX

1	Agnieszka Sadlowska	Faculty of Social Sciences	Statsvitenskap	Bachelor
2	Torbjørn Skinnemoen Ottersen	Faculty of Social Sciences	Public administration and leadership	Bachelor
3	Ida Kristine Garthe	Faculty of Humanities	Chinese Culture and Society	Master
4	Henrik Waage Rui	Faculty of Social Sciences	Political Science	Bachelor
5	Amalie Halle Christensen	Faculty of Social Sciences	Masters in Economic Theory and Econometrics	Master

Case OPX: Data collection and indicator building

The stakeholder presentations

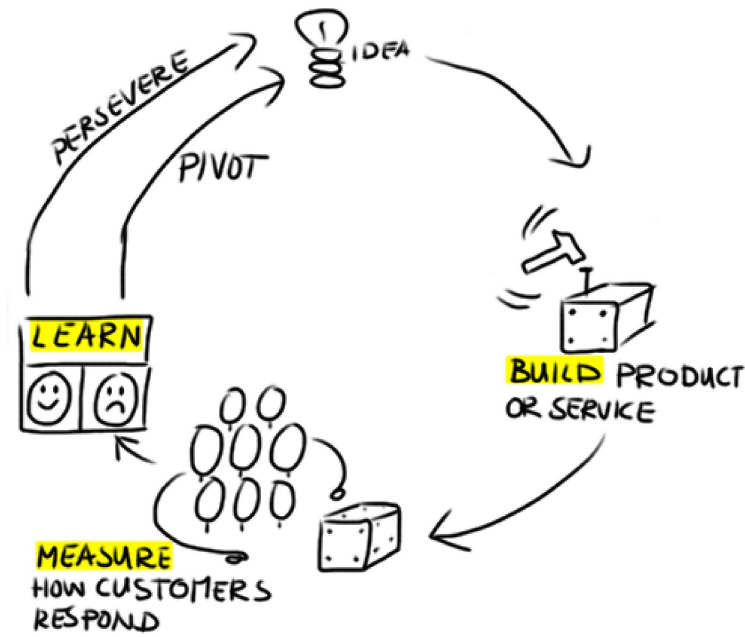
On Friday the 1st of July

Organization	Presenter	Time	Group
Statistics Norway (SSB)	Xeni Kristine Dimakos	10:15 - 10:35	1
United Nations Association of Norway (FN-sambandet)	Nicholas Wilkinson	10:40 - 11:00	3
Norad	Einar Tornes	11:05 - 11:25	2
Office of the Auditor General of Norway (Riksrevisjonen)	Aleksander Eilertsen	11:30 - 11:50	4
OPX (Oslo Philanthropic Exchange)	Bosse Langaas	11:55 - 12:15	5

Agile working methods

The *agile manifesto*:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

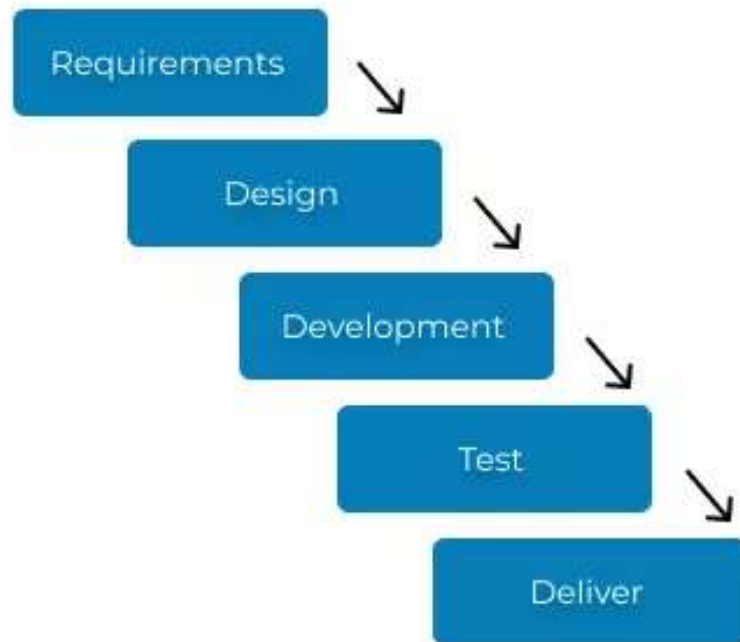


Agile working methods

- **Minimum viable product (MVP):** The least finished product you can make that will still allow you to test the functionality.
- **Sprints:** Short sessions of work (e.g. one week) with clearly defined tasks
- **Stakeholders:** Frequently talk to the people who are going to use your product – does it address their needs?
- **Roles:**
 - Product owner: Knows what the product should look like in the end
 - Team: Developers of the product
 - Scrum master: Facilitates the work

Agile working methods

Traditional vs Agile Planning



The Belbin Strength Test

How to capitalize on each others' strengths?

Belbin's Team Roles | Key Management Models












The Belbin Strength Test

Find the test in Canvas.

BELBIN'S 9 TEAM ROLES

Enter your sub headline here

			Team Role Contribution	Allowable Weakness	
Thinking	Plant	PL		Creative, Imaginative, Free thinking. Generate ideas and solves hard problems	Ignores incidentals. Too Pre-occupied to fully communicate.
	Monitor Evaluator	ME		Sober, strategic and discerning. Sees all options and judges accurately.	Lacks drive and ability to inspire others. Can be overly cititical.
	Specialist	SP		Single minded, self starting, dedicated. Provides rare knowledge and skills.	Contributes only on a narrow front. Dwells on Technicalities.
Action	Shaper	SH		Challenging, dynamic, thrives on pressure. Has drive to overcome obstacles.	Prone to provocation. Offends People's feelings.
	Implementer	IMP		Practical, reliable, efficient. Turns ideas into actions and organizes tasks.	Somewhat inflexible. Slow to respond to new possibilities.
	Completer Finisher	CF		Painstaking, conscientious, anxious. Finds errors. Polishes and perfects.	Inclined to worry unduly. Reluctant to deligate.
People	Coordinator	CO		Mature, confident, identifies talent. Clarifies goals. Delegates effectively.	Can be seen as manipulative. Offloads own share of the work.
	Team Worker	TW		Co-operative, perceptive and diplomatic. Listens and averts friction.	Indecisive in crunch situations. Avoids confrontation.
	Resource Investigator	RI		Outgoing, enthusiastic, Communicative. Explores opportunities, develops contacts.	Over optimistic. Loses interest, once initial enthusiasm expires.

Questions?

