

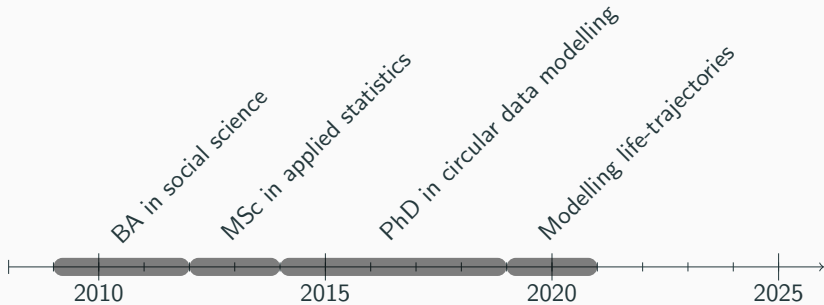
Modelling life-trajectories from register data

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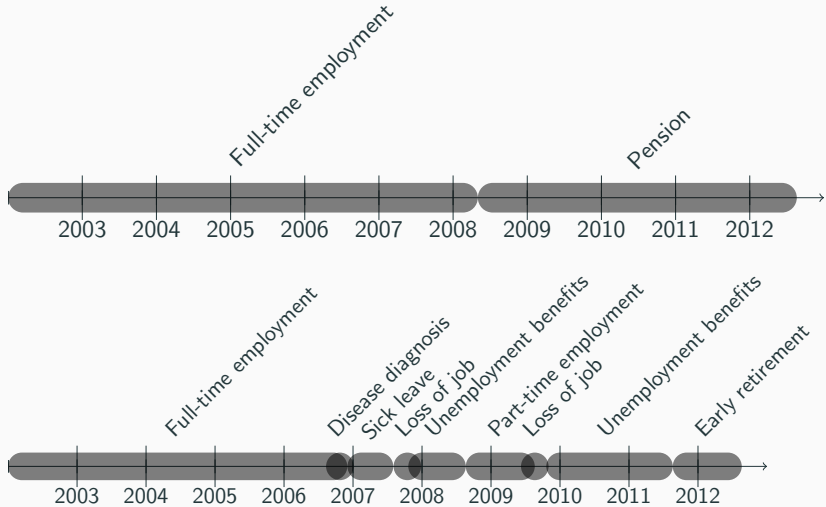
1. My research (life) trajectory
2. Life Trajectories
3. Research Project

My research (life) trajectory



Life Trajectories

Employment trajectories of older individuals



Different Research Questions

- Describing and explaining the transitions between states.
 - Which individuals switch?
 - What states to they switch to?
 - What states do they switch from?
 - Why do they switch?
- Describing and explaining patterns: more/less switching, lengths of states, orders of patterns.
 - Which individuals switch more often?
 - Which individuals stay in a specific state (e.g. unemployment) longer?

Modelling Approaches

- Confirmatory:
 - multi-state models
 - (dynamic) regression models
 - (dynamic) Bayesian networks (parameter learning)
- Exploratory:
 - (dynamic) Bayesian networks (structure learning)
 - sequence analysis

Research Project

Main Objective

Exploring the use of Bayesian networks (and other methods) for modelling life-trajectories from register data.

Modelling Challenges

- Scalability (monthly data on the entire danish population over 8 years)
- Categorical and continuous variables
- How to model time?
- Right censoring (people die or leave Denmark...)
- Missingness on covariates