

# Mechanism Design and Online Economics

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We live in a digital world. People search, shop, work, and socialize online. In the last two decades we have seen emergence of new businesses and whole new sectors of the economy. Expedia, booking, google, Yandex, amazon, eBay, uber, pandora, netflix, facebook, apple — these are only a few examples of companies who have created new or transformed existing markets.

This project is (mostly) about theory: how can we (as economists) model and analyze behavior of participants (users, firms, platforms, policy makers) in these new markets, and, possibly offer better designs? This area is particularly exiting (and challenging at the same time) for research as the markets, economic and social phenomena, are new and emerging, effectively being an uncharted territory. Below is a short list of possible topics that I list more like an indication of a range of possible research topics. I expect that each student in the project would come up with own research question, broadly aligned with the overall topic of the project.

A few topics

1. Design and analysis of online economic mechanisms (especially auctions, but other mechanisms, e.g. queues, lotteries, pricing, matching are possible). Examples of problems: allocation of advertising positions, provision of cloud services, design of recommender systems, optimal information provision, persuasion, crowdfunding and collective action.
2. Analysis of performance, processes, users' activities of various economic mechanisms. E.g., ad auctions, procurement auctions, crowdfunding platforms, any digital services.
3. How links/ matches/ networks influence social and economic behaviour.
4. Analysis and modeling of privacy concerns.
5. Using online behaviour and data to measure economic phenomena.