## Research Statement

### Gleb Romanyuk

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My primary research interests lie in the area of microeconomic theory, market design, game theory, and industrial organization.

My job marker paper "Ignorance is Strength: Improving Performance of Matching Markets by Limiting Information" develops a framework for analyzing information disclosure problem in matching markets. The model is a persuasion problem on the seller side of the market where sellers have preferences over buyers and limited capacity. I show that increased observability does not necessarily lead to market improvement. Specifically, full disclosure is Pareto-suboptimal for buyer and seller surpluses. Increased observability of buyer characteristic induces sellers to cream-skim, that is to reject inefficiently often. As a result, coarse information disclosure restores efficiency. The particular form of coarsening necessary to improve the efficiency depends on the details of the seller payoff function and private information. I characterize the optimal disclosure mechanism.

In a working paper "A Price Theoretic Model of Search Intermediation by Online Platforms" coauthored with Greg Lewis and Albert Wang, we analyze the incentives of online search intermediaries in environments where buyers must compete for limited supply (e.g. airlines, hotels). We find conditions on the primitives when an intermediary who maximizes seller revenue will optimally maintain positive search costs in order to steer searchers to the market where they generate the most revenue.

Research agenda. In the recent years, a number of innovative new companies appeared whose business model relies on some type of platform or market design. How should these markets be designed? Research questions on topics of marketplace design and platform strategy are fascinating and increasingly relevant<sup>1</sup>. Concrete questions I want to explore include

- product company vs. a platform, endogenous network effects (e.g. Hagiu and Wright (2015));
- "revenue maximizing matching", design of matching markets with endogenous participation:

<sup>&</sup>lt;sup>1</sup>E.g., 19% of the total US adult population has engaged in a sharing economy transaction (2015, PWC); by 2025, online talent platforms could boost global GDP by \$2.7 trillion (McKinsey, 2015).

- the tradeoff between information elicitation and transaction costs (informally introduced in Einav et al. (2016));
- centralized vs. decentralized marketplaces;
- the role of coarse information disclosure/standards/conflation in financial markets;
- universal marketplace vs. niche verticals.

Given the abundance of data available on the digital economy, as well as other sectors affected by digitization, I am open to doing empirical work on these subjects.

## References

Einav, L., Farronato, C. and Levin, J. (2016) Peer-to-Peer Markets, *The Annual Review of Economics*, 8, 615–635.

Hagiu, A. and Wright, J. (2015) Marketplace or reseller?, Management Science, 61.

# Teaching Statement

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In the past, I have had teaching experience on several occasions:

- Three times as a teaching fellow in an undergraduate-level econometrics class
- Two times in an advanced undergraduate-level game theory class taught by Professor Drew Fudenberg
- Graduate level economic theory of social networks taught by Professor Matt Jackson.

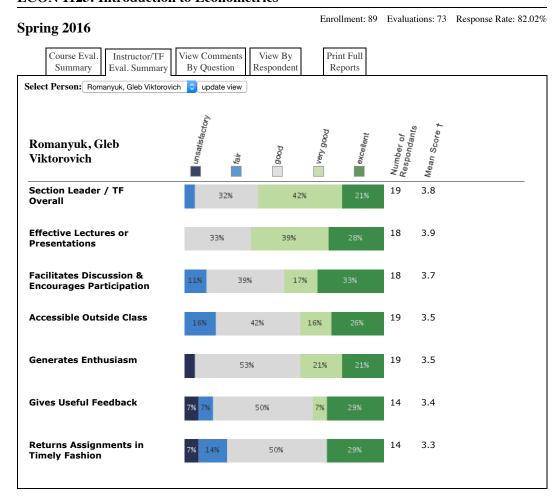
For my teaching approach, I prefer interactive environment; teaching by example that facilitates the understanding of complex ideas. I want to make sure students see the purpose of them being in every class. Quoted from course evaluations from Spring 2016 econometrics course (see score evaluation attached below):

- "He is always trying to make section fun, interactive, and helpful. It was really great when he gave explanations that were different from lecture/the book. He also fields stupid questions very well. Someone asked what a p-value was and he didn't even bat an eye- I was impressed."
- "I learned most of this course through the section. Gleb was good at going through the material at the level that is required for understanding unlike during lecture."

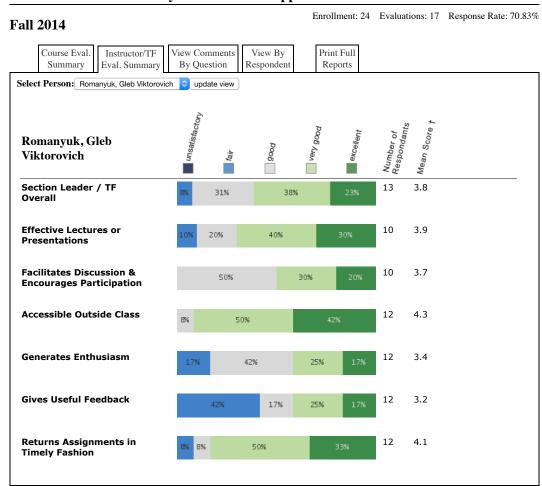
As a prospective assistant professor, I can teach

- core courses in microeconomics and strategy;
- MBA electives on market design, platform economics, digital economy and two-sided markets:
- PhD courses on microeconomics, theoretical industrial organization and market design.

#### **ECON 1123: Introduction to Econometrics**



**ECON 1052: Game Theory and Economic Applications** 



**ECON 2098: Topics in Economic Theory** 

