CURRICULUM VITAE

Georgios Petropoulos

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Personal Information

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Current Positions

11/03/2019- Today: Post-doctoral Fellow, MIT Sloan (Initiative on the Digital Economy)
01/04/2016-Today: Research Fellow, Bruegel.

Research interests

Digital Economy, Competition Policy, Labour Economics

Education and Training

2006: BSc. in Physics, Aristotle University of Thessaloniki.
2007: MSc. in Astrophysics, Utrecht University.
2008: MSc. Mathematical Economics and Econometric Methods, Tilburg University.
2009: Research Master in Economics, Tilburg University.
2011: Master 2 in Markets and Organizations, Toulouse School of Economics.
2012: Trainee at European Central Bank.
2013: Research Internship at Banque de France.
08/2017: PhD degree from Toulouse School of Economics (PhD advisors: Philippe Aghion and Patrick Rey)

Research activities relevant to Artificial Intelligence

- Research work in progress: Robots and EU Employment, with Enrico Bergamini and Catarina Midoes
- Francesco Chiacchio, Georgios Petropoulos and David Pichler (2018). *The Impact of Industrial Robots on EU Employment and Wages: A Local Labour Market Approach*. Bruegel Working Paper Series.
- Georgios Petropoulos (2018). *The impact of artificial intelligence on Employment.* Chapter contribution to the edited volume The Fourth Industrial Revolution: Opportunities and Threats Work and Welfare. Rowman and Littlefield International. Editors: Jacqueline O'Reilly, Max Neufeind and Florian Ranft.
- Presentation at Robots and Artificial Intelligence Bruegel event, in Brussels (04/2018)
- Presentation on robots and employment at the 14th Joint ECB/CEPR Labour Market Workshop, in Frankfurt (12/2018).
- Presentation on artificial intelligence at the 2nd International Conference on Standardization, Patents and Competition Issues, in New Delhi (06/2017).
- Presentation in AI and competition at the Digital Competition and Price Differentiation in Denmark (06/2017).
- Presentation at Algorithmic Opportunities, Transparency and Accountability, European Parliament, Brussels (06/2017).
- Presentation at Cyber Competition Conference: New challenges for antitrust enforcers? in Brussels (09/2017).
- Presentation at Asia-EU Digital Economy Dialogue, John Hopkins University, Washington DC (11/2017).
- Presentation at The Future of Work: fear of loathing of the AI revolution event, Microsoft Brussels (05/2018)
- Presentation at The Future of Work, European Youth Forum, Cascais, Portugal (06/2018)
- Presentation at Digitalisation & Work – ICT, Driver of Social Value, Brussels (10/2018).
- Presentation at The Socio-economic Impact of Technological Change, Rome, (11/2018).
- Presentation at Automation, Jobs and the Future of Work, Riga (01/2019).
- Blog post on The economic value of personal data for online platforms, firms and consumers (with Cassandra Liem)
- Blog post on Search Engine, Big Data and Network Effects
- Blog post on Machines that learn to do, and do to learn: What is artificial intelligence?
- Blogpost on Do we understand the impact of artificial intelligence on employment?
- Blogpost on The growing presence of robots in EU industries

Summary of my interest in AI

I am interested on the impact of artificial intelligence on:

1) labour markets: I am studying empirically the implications of artificial intelligence and machine learning on jobs across different demographic groups, educational levels, occupations and industries. My primary focus so far is on EU labour markets where together with colleagues we have constructed a European-wide dataset to facilitate such a study. We are currently developing a paper that estimates the impact of industrial robots on the EU employment. I am also concerned about the qualitative implications of artificial intelligence on the nature of work and its transformative power on jobs. For example, new technologies have led to a rise of informal work. This phenomenon has generated a debate on how we should define work and social protection in such flexible forms of work. I am trying to derive robust policy options that can address both the qualitative and quantitative implications of artificial intelligence on jobs. I recently joined the digital economy group of MIT Sloan where I also started being interested in the relationship between artificial intelligence and economic growth as well as productivity.

2) market competition: Many of the digital companies use personal data as input in their algorithms. So, it is important to study the implications of personal data for the effectiveness of the algorithm as well as market competition. The first question I am studying is whether the use of personal data by digital platforms raise entry barriers. Moreover, I am working on price discrimination by algorithmic systems trying to understand i) when algorithmic bias and discrimination is emerging in firms' equilibrium strategies; ii) how the market power of the algorithmic system is related to a firm's incentives to discriminate; iii) what the social welfare implications of market discriminatory strategies are.