



Industrial Relations Unit (IRRU)

Seminar Speaker Series – Spring 2024 (Term 2)

Speaker: Dr Fabian Stephany, Assistant Professor in AI & Work, Oxford Internet Institute (OII), University of Oxford

Title: The SkillScale Project: The Growing Premium of AI Skills

Date: Wednesday 14 February 2024

Venue: WBS Teaching Centre, room M4 (and online via Zoom)

Time: 13:00 – 14:30 (GMT)

Abstract: The global workforce is urged to constantly learn, as technology tremendously changes the demand for skills. The SkillScale project (www.skillscale.org) at the Oxford Internet Institute, University of Oxford, leads into a new domain of labour market research illustrating how the analysis of digital labour market data can help us understand the nature and relevance of new skills. This talk summarises the group's most relevant findings so far with the example of three papers.

The group's [most recent publication](#) explores the concept of skill complementarity as a key determinant of economic value, as we unveil the profound influence of complementarity, highlighting how a skill's value hinges on its ability to synergise with other high-value competencies. The relative value of skills depends on an individual's existing skill background, with most skills proving most valuable when combined with those of a different nature. In the realm of Artificial Intelligence (AI), we find that AI skills emerge as particularly valuable, offering significant average wage premium across sectors.

In light of the growing relevance of AI skills, [our current preprint paper](#) underscores the potential of skill-based hiring practices, which employers in the AI sector have increasingly adopted, potentially expanding the talent pool and fostering hiring flexibility. Notably, our analysis of one million online job vacancies from the UK reveals that individual skills, rather than formal qualifications, now define job advertisements for AI roles, elucidating the substantial salary premiums in this domain. In our sample, AI skills have a wage premium of 16%, similar to having a PhD (17%).

Finally, in our current work in progress, we examine the added value of AI skills for specialist and generalist knowledge workers to find that AI competencies amplify the premium that specialised skill sets already have on the labour market. We model the change in skill composition with the emergence of GenAI in early 2023 and find that both generalist and specialist add new AI skills to their portfolios, however, this strategy increases specialist's wages more than those of generalists. Ultimately, the findings of the project allow us to establish a contemporary taxonomy of skills,

understand their application and support individual and far-sighted suggestions on sustainable re-skilling and training in a time of technological disruption.

Bio:

Fabian Stephany is an Assistant Professor in AI & Work at the Oxford Internet Institute (OII), University of Oxford, a Research Affiliate at the Humboldt Institute for Internet and Society in Berlin and a Fellow at the Brussels-based Think Tank Bruegel. Leading the SkillScale Project, Fabian investigates the emergence of new skills and sustainability of novel occupations in times of technological disruption. He is a co-creator of the Online Labour Observatory – a digital data hub, hosted by the OII and the International Labour Organisation, for researchers, policy makers, journalists, and the public interested in online platform work. His research has been published in leading academic journals and was covered by Washington Post, The New York Times, The Telegraph, The Statesman, Nikkei Asia, and other popular media around the world. Fabian holds a PhD and degrees in Economics and Social Sciences from different European institutions, including Università Bocconi Milan and University of Cambridge. As an Economist and Senior Data Scientist, Fabian has been working in the private sector and for various actors in the international policy landscape, such as the United Nations Development Programme, the World Bank or the OECD in Paris.

Registration:

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