

Humans, Jobs, and the Economy: The Future of Finance in the Age of Big Data

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ABSTRACT

Finance is the efficient allocation of capital to achieve individual and societal objectives. Finance runs on information, from the number of ships under construction in the ports of Dalian, to the beliefs of investors in a marketplace—we want to put capital to work in the places it will have the biggest impact. Increasingly, large new data sources are facilitating our understanding of how individuals, teams, companies, governments, and other entities operate, allowing for new types of modelling that can unlock value and accelerate growth. In this talk, we will explore several open questions at the intersection of individuals, jobs, companies, and financial markets, where new data brings the promise of new understanding. How do people and firms interact to create economic value? How do we accelerate this value creation? How can the KDD community help?

CCS CONCEPTS

• **Networks** → **Network algorithms**; • **Computing methodologies** → **Machine learning approaches**; **Learning settings**; *Search methodologies*;

KEYWORDS

Dynamic Network Structure, Machine Learning, Economics, Finance, Labour Markets

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1 BIOGRAPHY

James Hodson is a researcher, entrepreneur, and social activist. His work spans Machine Learning, Economics, Sustainable Global Development, Sociology, and Philosophy. James currently serves as Chief Science Officer of Cognism, an AI-powered Financial, Human Resources, Sales, and Marketing intelligence platform; as CEO of the AI for Good Foundation; and as Senior Researcher at the Artificial Intelligence Department of the Jozef Stefan Institute, Slovenia. Through these roles, James seeks to effect lasting change in our economies, societies, and scientific understanding. He is an early stage investor in technology-focussed start-ups, nurturing leadership, teams, energy, and innovation. Previously, James built and directed the AI Research group at Bloomberg in New York, a 20+ research focussed group across ML, NLP, Knowledge Engineering, Reasoning, and Inference. He was a researcher at the German National Research Laboratory for Artificial Intelligence (DFKI), and holds patents across Machine Translation and Network Inference.

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