Gina Glock

Algorithmic Decision-Making in Service Work

An Analysis of Changing Job Autonomy



Arbeit, Digitalisierung und Organisation

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"My work comes to me in a completely automatic way, in the gestures of an automation. [...] But underneath this my mind never stops working. It lives by itself. Some call it dreaming, and if so, I am dreaming all day long, five days a week. [...] The whole bench dreams like this. It is a gallery of automations locked in dreams."

From Bryan Slater's On the line in Ronald Fraser's Work: Twenty personal accounts (1968, pp. 97–98). Found in Amelia Horgan's Lost in work. Escaping capitalism (2021, p. 49).

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List of abbreviations

ADM Algorithmic Decision-Making

AI Artificial Intelligence
ANN Artificial Neural Networks

BAuA Federal Institute for Occupational Safety and Health
BIBB Federal Institute for Vocational Education and Training

DA Data analytics
DL Deep learning
ETB Employment Survey

GDPR General Data Protection Regulat HAS Highly autonomous service

ICT Information and Communications Technologies

JCI Job Characteristic Inventory JDC Job Demand-Control Model JD-R Job Demands-Resources Model

JDS Job Diagnostic Survey

KIS Knowledge-intensive services LAS Less autonomous service

LEEP Linked-Employer-Employee-Panel LKIS Less knowledge-intensive services

M Mean

ML Machine learning

NLP Natural language processing PEP Personnel resource planning

PoC Point of Care pp Percentage points SD Standard deviation

SOEP-IS Socio-Economic Panel Innovation Sample

TBA Task-based Approach

w/o Without

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