

Gina Glock

# Algorithmic Decision-Making in Service Work

An Analysis of Changing Job Autonomy



Nomos

# Arbeit, Digitalisierung und Organisation

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Volume 3

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# Algorithmic Decision-Making in Service Work

An Analysis of Changing Job Autonomy



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This publication originated from a doctoral scholarship  
at the Schaufler Lab@TU Dresden, a joint project of  
THE SCHAUFLEER FOUNDATION and the Dresden University of Technology.

Diese Publikation entstand in Rahmen eines Promotionsstipendiums  
am Schaufler Lab@TU Dresden, ein gemeinsames Projekt von  
THE SCHAUFLEER FOUNDATION und der Technischen Universität Dresden.

**SCHAUFLEER LAB**  
**TU DRESDEN**

A joint project by: | Ein Projekt von:



Diese Open Access Publikation wurde vom Open Access Publikationsfonds der  
Sächsischen Landesbibliothek, Staats- und Universitätsbibliothek gefördert.

We acknowledge support for the open access publication by the Open Access  
Publication Fund of Saxon State and University Library Dresden (SLUB).

**The Deutsche Nationalbibliothek** lists this publication in the  
Deutsche Nationalbibliografie; detailed bibliographic data  
are available on the Internet at <http://dnb.d-nb.de>

a.t.: Dresden, Univ., Diss., 2024

1st Edition 2024

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Published by  
Nomos Verlagsgesellschaft mbH & Co. KG  
Waldseestraße 3–5 | 76530 Baden-Baden  
[www.nomos.de](http://www.nomos.de)

Production of the printed version:  
Nomos Verlagsgesellschaft mbH & Co. KG  
Waldseestraße 3–5 | 76530 Baden-Baden

ISBN 978-3-7560-1013-4 (Print)

ISBN 978-3-7489-4666-3 (ePDF)

DOI <https://doi.org/10.5771/9783748946663>



Online Version  
Nomos eLibrary



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# Acknowledgements

As a member of the Schaufler Lab@TU Dresden, I would like to thank all the people behind the organization who have accompanied and supported me since 2020 and who have kept my back free both organizationally and financially.

My sincere thanks go to Prof. Dr. Antonia Kupfer, who not only guided me on my path to my doctorate but, above all, gave me the chance and the confidence to start this project in the first place.

My thanks go to Prof. Dr. Sabine Pfeiffer, who always managed to provide motivating and instructive advice at the right moments.

Without the support and time commitment of my interview partners, this thesis would not have been possible. I would like to thank the employees of the outpatient care provider in the first case study, who participated in this project with great engagement despite the large volume of work. I would also like to thank the employees of the second case study company in banking services, who gave me a deep insight into their daily work despite the ongoing economic pressure. I would like to thank the experts who gave me valuable information in our discussions that extended well beyond my empirical analyses.

I must thank my parents, who made my path into education and science possible in the first place. I do not think any of us would have guessed that I would go on to do a doctorate.

I would like to thank my dear friends who never doubted that I could complete this project. I have never lacked support or motivating words.

Finally, my thanks go to my partner, who has experienced, supported, and endured the daily highs and lows of this project like no other.

I am beyond happy and proud to have completed this project.  
I am looking forward to what's ahead.

*“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 Regulation
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

This thesis follows the citation style of the 7th edition of the American Psychological Association (APA).

