

## Acknowledgments

More than politeness, it is a matter of intellectual integrity to warmly thank those who helped me become the author of this book. To begin with, I would like to express my deepest gratitude to the members of the computer science laboratory who let me follow their day-to-day activities. Having an ethnographer around for more than two years must have been an odd experience. Yet I could not have wished for more comprehension toward my research topic and patience toward my clumsiness. It goes without saying that this inquiry could not have been written without the support of these brilliant computer scientists who quickly became my colleagues and friends.

If I enjoyed spending time in this computer science laboratory, it was also thanks to its director. By giving me an office, providing me with insightful feedback, and asking me to actively participate in the daily life of her laboratory, Sabine Süssstrunk of the Swiss Federal Institute of Technology Lausanne (EPFL) immensely facilitated my integration. I simply could never have dreamed of a better interdisciplinary collaboration.

My mentor Dominique Vinck has given me so many valuable tips, insights, and feedback throughout this inquiry that I wish I could have applied the following seal on the cover of this document: *Dominique Vinck Inside*<sup>®</sup>. It has been a privilege to be the student of such an inspiring professor.

This book also benefited from the insights of my colleagues at the Institute of Social Sciences of the University of Lausanne. Marc Audétat, Lola Auroy, Nicolas Baya Laffite, Boris Beaude, Luca Chiapperino, Laetitia Della Bianca, Olivier Glassey, Sara Guzmán, Anna Jobin, Nicky Lefevvre, Pierre-Nicolas Oberhauser, Francesco Panese, Andréas Perret, Jessica Pidoux,

Margarita Rodriguez, Yohana Ruffiner, Marie Sautier, Romina Seminario, Tatiana Smirnova, Léa Stiefel, and Mylène Tanferri Machado: they all greatly contributed to my intellectual education. And I would like to extend a special thank you to Alexandre Camus, who, besides having given me great suggestions, has also stood for my fears, rants, and sudden bursts of joy (and despair).

To transform what was then a cumbersome thesis into an acceptable book, I benefited from a postdoctoral research stay at the Centre de Sociologie de l'Innovation of Mines Paristech, PSL Research University. And without the precise advice and comments of Félix Boilève, Jérôme Denis, Quentin Dufour, Liliana Doganova, Evan Fisher, Clément Gasull, Cornelius Heimstädt, Antoine Hennion, Brice Laurent, Fabian Muniesa, Émilie Perault, David Pontille, Mathieu Rajaoba, and Loïc Riom, this book would contain many more weaknesses than it has today. I also warmly thank Nassima Abdelghafour, Madeleine Akrich, Marie Alauzen, Mathieu Baudrin, Victoria Brun, Béatrice Cointe, Jean Danielou, Catherine Lucas, Alexandre Mallard, Morgan Meyer, Florence Paterson, Mathilde Pellizzari, Vololona Rabeharisoa, Roman Solé-Pomies, Sophie Tabouret, Félix Talvard, Carole-Anne Tisserand, Didier Torny, Frédéric Vergnaud, and Alexandre Violle for having welcomed me to their wonderful research center.

Easily distressed by administrative duties, I have been lucky to benefit from the help of amazing secretaries throughout my PhD and postdoctoral grants. To a great extent, it is thus thanks to Françoise Behn, Marianna Schismenou, Alba Brizzi, and Joëlle de Magalhaes that I could finally produce this document.

Funding is integral part of research. Thus I thank the Swiss National Science Foundation for its financial support throughout the completion of this work. Funding such a fundamental research project at the intersection of philosophy and computer science was for sure a risky investment. I cannot, of course, decide whether this work keeps the numerous promises I made to get both my PhD (POLAP1 148948) and postdoctoral grants (P2LAP1 184113). I can only assert that over the past few years, a great part of my vital energy was dedicated to the accomplishment of this project. I also wish to extend my thanks to the Société Académique Vaudoise for its generous support between October and December 2018.

From 2016 to 2017, I spent a year abroad at the EVOKE Lab and Studio of the University of California, Irvine (UCI) as part of my PhD program.

With regard to this formative experience, I must start by thanking Myles, Kyle, Dave, and Laura Jeffrey who never stopped considering me as part of their Californian family. I am also very grateful to my UCI colleagues at that time—Anja Bechmann, Roderic Crooks, Simon Penny, John Seberger, and Aubrey Slaughter—who greatly helped the completion of the book's second, third, and fourth chapters. And what can I say about the amazing collections of the University of California Libraries? Without the daily invisible work of University of California librarians, I could not have accessed the crucial references I needed to propose, I hope, innovative propositions. However, this Californian experience would have been impossible without the unconditional support of Geoffrey C. Bowker who believed in this project from the very beginning.

Obviously, this document benefited from the support of MIT Press, Inside Technology Series. In this regard, I want to thank the series' editorial staff for their kindness and unfailing availability throughout the publication process. I am also grateful to the anonymous reviewers and copyeditors who contributed to making this work better than it initially was. Of course, and this concerns all those who helped me to produce this book; all mistakes and low passes remain mine.

My close friends have helped, supported, and inspired me so much during my not-yet-really-started academic career that it will be unfair not to name them. Thus from the bottom of my heart, I want to thank Julien Bugnon, Gabriel Buser, Frédéric Clerc, Loïs de Goumoëns, Christophe Durant, Simon Duvoisin, Antoine Favre, Vincent Klaus, Nicolas and Vanessa Krieg, Naïke and Stéphane Lévy, Mathieu and Nancy Morier, Marco Picci, Coralie Pittet, Estelle and Vincent Rossire, Mathias Schild, Lucas Turrian, Nicolas Vautier, and Élise Vinckenbosch. It is a real privilege to be your friend.

As this work is the direct product of their unconditional affection, I finally wish to express my deepest gratitude to my mother, Katia; my father, Jean-Pierre; my sister, Laure; my brother, Damien; and my niece, Lina. And to Fanny, who lovingly supports me in the vicissitudes of intellectual life: Thank you for bringing infinite light.



This is a section of [doi:10.7551/mitpress/12517.001.0001](https://doi.org/10.7551/mitpress/12517.001.0001)

# The Constitution of Algorithms

## Ground-Truthing, Programming, Formulating

By: Florian Jatón

### Citation:

*The Constitution of Algorithms: Ground-Truthing, Programming, Formulating*

By: Florian Jatón

DOI: [10.7551/mitpress/12517.001.0001](https://doi.org/10.7551/mitpress/12517.001.0001)

ISBN (electronic): 9780262363235

Publisher: The MIT Press

Published: 2021

The open access edition of this book was made possible by generous funding and support from Arcadia – a charitable fund of Lisbet Rausing and Peter Baldwin



The MIT Press

© 2020 Massachusetts Institute of Technology

This work is subject to a Creative Commons CC-BY-NC-ND license.

Subject to such license, all rights are reserved.



The open access edition of this book was made possible by generous funding from Arcadia—a charitable fund of Lisbet Rausing and Peter Baldwin.



ARCADIA

A charitable fund of Lisbet Rausing and Peter Baldwin

This book was set in Stone Serif and Stone Sans by Westchester Publishing Services.

Library of Congress Cataloging-in-Publication Data

Names: Jaton, Florian, author. | Bowker, Geoffrey C., writer of foreword.

Title: The constitution of algorithms : ground-truthing, programming, formulating / Florian Jaton ; foreword by Geoffrey C. Bowker.

Description: Cambridge, Massachusetts : The MIT Press, [2020] | Series: Inside technology | Includes bibliographical references and index.

Identifiers: LCCN 2020028166 | ISBN 9780262542142 (paperback)

Subjects: LCSH: Algorithms--Case studies. | Computer programming--Case studies. | Algorithms--Social aspects. | Mathematics--Philosophy.

Classification: LCC QA9.58 .J38 2020 | DDC 518/.1--dc23

LC record available at <https://lccn.loc.gov/2020028166>