

CAMBRIDGE
UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India
103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781108484992

DOI: 10.1017/9781108755023

© Louise A. Dennis and Michael Fisher 2023

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

First published 2023

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Dennis, Louise, author. | Fisher, Michael, 1962- author.

Title: Verifiable autonomous systems : using rational agents to provide assurance about decisions made by machines / Louise A. Dennis,

University of Manchester, Michael Fisher, University of Manchester.

Description: Cambridge, United Kingdom ; New York, NY, USA : Cambridge University Press, 2023. | Includes bibliographical references and index.

Identifiers: LCCN 2023006704 | ISBN 9781108484992 (hardback) | ISBN 9781108755023 (ebook)

Subjects: LCSH: Robust control. | Automatic control. | Machine learning. | Computer programs—Verification.

Classification: LCC TJ217.2 .D46 2023 | DDC 629.8—dc23/eng/20230302

LC record available at <https://lcn.loc.gov/2023006704>

ISBN 978-1-108-48499-2 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.