about the author



DR. ALAA KHAMIS works as AI & Smart Mobility Technical Leader at General Motors Canada. He is also a Lecturer at the University of Toronto, an Adjunct Professor at Ontario Tech University and Nile University, and an Affiliate Member of the Center of Pattern Analysis and Machine Intelligence (CPAMI) at the University of Waterloo. He worked as an Autonomous Vehicles Professor at Zewail City of Science and Technology, Head of AI at Sypron Solutions, Associate Professor and Head of Engineering Science Depart-

ment at Suez University, Associate Professor and Director of Robotics and Autonomous Systems (RAS) research group at German University in Cairo (GUC), Research Assistant Professor at the University of Waterloo, Canada, Visiting Professor at Universidad Carlos III de Madrid, Spain, and Université de Sherbrooke, Canada, Visiting Researcher at the University of Reading, UK, and Distinguished Scholar at the University of Applied Sciences Ravensburg-Weingarten, Germany. His research interests include smart mobility, autonomous and connected vehicles, cognitive IoT, algorithmic robotics, intelligent data processing and analysis, machine learning, and combinatorial optimization. He has published five books and more than 200 scientific papers in refereed journals and international conferences. He has also filed 64 US patents, defensive publications, and trade secrets. For more information, please visit www.alaakhamis.org.

ABOUT THE TECHNICAL EDITOR

Frances Buontempo has many years of C++, Python, and machine learning experience. She has given talks on both and edits ACCU's *Overload* magazine. She has written two books: *Genetic Algorithms and Machine Learning for Programmers* (Pragmatic Bookshelf, 2019) and *Learn C++ by Example* (Manning, 2024). Frances has also often helped as a Manning editor, helping others be clearer, and she believes she can explain complicated things clearly.

about the cover illustration

The figure on the cover of *Optimization Algorithms* is "Insulaire de Oonalaska," or "Onalaska Islander," taken from a collection by Jacques Grasset de Saint-Sauveur, published in 1797. Each illustration is finely drawn and colored by hand.

In those days, it was easy to identify where people lived and what their trade or station in life was just by their dress. Manning celebrates the inventiveness and initiative of the computer business with book covers based on the rich diversity of regional culture centuries ago, brought back to life by pictures from collections such as this one.