

Math Handbook for Machine Learning is the ensemble of notes gathered from my Ph.D. dissertation research on Machine Learning (ML) topics. Fortunately, there exists a large body of literature on this subject. However, much of the on-line material is confusing (and often inaccurate), with inconsistent nomenclature. This text provides a reference of high school through graduate-level math, so that anyone can refer to this text while performing their own research.

Features that distinguish this book from others: The notation and analysis is developed and consistent across the chapters & fields of mathematics. Great pains have been taken to compile a large body of mathematics literature into one concise and consistent notation. Thus, the reader is introduced to the notation once, and can therefore spend the rest of their time refreshing their memory of algorithms instead of learning new notation.

Paul F. Roysdon holds a Ph.D. Electrical Engineering (focus in Applied Mathematics & Statistics), from the University of California, as well as an M.S. in Aeronautical Engineering, M.S. in Electrical Engineering, M.S. in Mechanical Engineering, and B.S. in Aeronautical & Mechanical Engineering. He has nearly twenty years experience in engineering and applied mathematics, solving real-world problems. He formerly worked in the private sector, with experience in aircraft design of military subsonic and supersonic unmanned vehicles, as well as software development and hardware testing of autopilots and navigation systems. He currently serves as a Chief Data Scientist at the Department of Defense.

Fibonacci Press



Roysdon

MATH HANDBOOK FOR MACHINE LEARNING

Fibonacci Press

MATH HANDBOOK

for Machine Learning

Paul F. Roysdon, Ph.D.

Fibonacci Press