



3 Courses

Mathematics for Machine  
Learning: Linear Algebra

Mathematics for Machine  
Learning: Multivariate Calculus

Mathematics for Machine  
Learning: PCA

Imperial College  
London

08/24/2020

**Muhammad Umair Shahid**

has successfully completed the online, non-credit Specialization

# Mathematics for Machine Learning

A sequence of 3 courses on the prerequisite mathematics for applications in data science and machine learning. Successful participants learn how to represent data in a linear algebra context and manipulate these objects mathematically. They are able to summarise properties of data sets and map them onto lower dimensional spaces with principal component analysis. Finally they can solve optimisation problems and use this skill to train models for describing data such as simple neural networks.

David Dye  
Professor of Metallurgy  
Department of Materials  
Imperial College London

Samuel J. Cooper  
Lecturer  
Dyson School of Design  
Engineering  
Imperial College London

Marc Deisenroth  
Senior Lecturer  
Department of  
Computing  
Imperial College London

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