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Preface

This is probably the first book devoted entirely to linear algebra and matrix analysis over the skew field of real quaternions.

The book is intended for the primary audience of mathematicians working in the area of linear algebra and matrix analysis, instructors and students of these subjects, mathematicians working in related areas such as operator theory and differential equations, researchers who work in other areas and for whom the book is intended as a reference, and scientists (primarily physicists, chemists, and computer scientists) and engineers who may use the book as a reference as well.

The exposition is accessible to upper undergraduate and graduate students in mathematics, science, and engineering. A background in college linear algebra and a modicum of complex analysis and multivariable calculus will suffice.

I intend to keep up with the use of the book. So, I have a request of the readers: please send remarks, corrections, criticism, etc., concerning the book to me at lxrodm@gmail.com or lxrodm@math.wm.edu.

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Leiba Rodman

Williamsburg, Virginia, September 2013