1. Record Nr. UNINA9910787376803321 Autore Chartier Timothy P. <1969-> Titolo When life is linear: from computer graphics to bracketology / / Tim Chartier [[electronic resource]] Washington:,: Mathematical Association of America,, 2015 Pubbl/distr/stampa **ISBN** 0-88385-988-2 1-61444-616-4 Descrizione fisica 1 online resource (ix, 136 pages) : digital, PDF file(s) Collana Anneli Lax New Mathematical Library;; 45 Altri autori (Persone) NelsenRoger B Disciplina 502.855262 Soggetti Mathematics - Computer programs Textbooks. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 10 Dec 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto ""Cover""; ""Half title""; ""Copyright""; ""Title""; ""Dedication""; ""Series""; ""Contents""; ""Preface""; ""Acknowledgments""; ""1 X Marks the Spot""; ""2 Entering the Matrix""; ""2.1 Sub Swapping""; ""2.2 Spying on the Matrix""; ""2.3 Math in the Matrix""; ""3 Sum Matrices""; ""3.1 Adding to Things""; ""3.2 Getting Inverted""; ""3.3 Blending Space""; ""3.4 Linearly Invisible""; ""3.5 Leaving Through a Portal""; ""4 Fitting the Norm""; ""4.1 Recommended Movie""; ""4.2 Handwriting at a Distance""; ""5 Go Forth and Multiply""; ""5.1 Scaly by Product""; ""5.2 Computing Similar Taste"" ""5.3 Scaling to Higher Dimensions"""5.4 Escher in the Matrix""; ""5.5 Lamborghini Spinout""; ""5.6 Line Detector""; ""6 It's Elementary, My Dear Watson""; ""6.1 Visual Operation""; ""6.2 Being Cryptic""; ""7 Math to the Max""; ""7.1 Dash of Math""; ""7.2 Linear Path to College""; ""7.3 Going Cocoa for Math""; ""8 Stretch and Shrink""; ""8.1 Getting Some Definition""; ""8.2 Getting Graphic""; ""8.3 Finding Groupies""; ""8.4 Seeing the Principal""; ""9 Zombie Math Decomposing""; ""9.1 A Singularly Valuable Matrix Decomposition"; ""9.2 Feeling Compressed""; ""9.3 In a Blur"" ""9.4 Losing Some Memory"""10 What Are the Chances?""; ""10.1 Down the Chute""; ""10.2 Google's Rankings of Web Pages""; ""10.3 Enjoying

the Chaos""; ""11 Mining for Meaning""; ""11.1 Slice and Dice""; ""11.2

Movie with not Much Dimension""; ""11.3 Presidential Library of Eigenfaces""; ""11.4 Recommendation Seeing Stars""; ""12 Who's

Number 1?""; ""12.1 Getting Massey""; ""12.2 Colley Method""; ""12.3 Rating Madness""; ""12.4 March MATHness""; ""12.5 Adding Weight to the Madness""; ""12.6 World Cup Rankings""; ""13 End of the Line""; ""Bibliography""; ""Index""

## Sommario/riassunto

"Tim Chartier has written the perfect supplement to a linear algebra course. Every major topic is driven by applications, such as computer graphics, cryptography, webpage ranking, sports ranking and data mining. Anyone reading this book will have a clear understanding of the power and scope of linear algebra." Arthur Benjamin, Harvey Mudd "Not only is it true that "Life Is Linear." as Tim Chartier asserts, but through his engaging style and modern, enticing applications he brings linear algebra to life. This small volume will be a popular read by math fans of all ages and of all backgrounds. Finally we have a little book that focuses on the utility and power of the theorems of linear algebra and makes that exploration joyful." Edward B. Burger, President and Professor, Southwestern University "I'm often asked which areas of mathematics should students study. I always say linear algebra. However, typical linear algebra texts I've seen either have very few applications, or the applications are contrived and not very relevant to students. Chartier's text is a refreshing change as it is driven by real-world applications that are inspiring and familiar to his audience. From Google searches and image processing to sports rankings and (my favorite) computer graphics." Tony DeRose, Pixar Animation Studios From simulating complex phenomenon on supercomputers to storing the coordinates needed in modern 3D printing, data is a huge and growing part of our world. A major tool to manipulate and study this data is linear algebra. When Life is Linear introduces concepts of matrix algebra with an emphasis on application. particularly in the fields of computer graphics and data mining. Readers will learn to make an image transparent, compress an image and rotate a 3D wireframe model. In data mining, readers will use linear algebra to read zip codes on envelopes and encrypt sensitive information. Chartier details methods behind web search, utilized by such companies as Google, and algorithms for sports ranking which have been applied to creating brackets for March Madness and predict outcomes in FIFA World Cup soccer. The book can serve as its own resource or to supplement a course on linear algebra.

Record Nr. UNINA9910809406103321 Autore Sant Alison **Titolo** From the ground up: local efforts to create resilient cities / / Alison Sant Pubbl/distr/stampa Washington, D. C.:,: Island Press,, [2022] ©2022 **ISBN** 9781610918978 9781610918961 Edizione [1st ed.] Descrizione fisica 1 online resource (306 pages) Disciplina 307.12160973 City planning - Environmental aspects - United States Soggetti City planning - United States City and town life - Environmental aspects - United States Resilience (Ecology) - United States Environmental justice - United States Urban climatology - United States Climatic changes - United States Climatic changes - Risk management - United States Case studies. United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Foreword / by Eric W. Sanderson -- Preface -- Introduction: Reimagining our cities -- Part 1: Reclaim the streets. Places by people, San Francisco: Safe streets for everyone, Minneapolis: Making the city accessible, New York City; Essay: Building the inclusive cities from the ground up / by Tamika L. Butler -- Part 2: Tear up the concrete. Living with water, New Orleans; Watershed planning, Portland; Green spaces for all, Philadelphia; Essay: Green infrastructure lessons from US cities / by Mami Hara -- Part 3: Plant the city. Canopy cover in the "City of trees", Washington, DC; From street trees to natural areas, New York

City; The forest in the city, Baltimore -- Part 4: Adapt the shoreline. Restoring nature and building equity, San Francisco; Growing one

billion oysters, New York City; Moving away from the coast, Louisiana; Essay: Adapting urban district to sea=level rise by mimicking natural processes / by Kristina Hill -- Conclusion: A path forward.