1. Record Nr. UNINA9910440647003321 Autore Paluszek Michael Titolo MATLAB recipes: a problem-solution approach / / Michael Paluszek, Stephanie Thomas [Place of publication not identified]:,: Apress,, [2020] Pubbl/distr/stampa ©2020 1-4842-6124-0 **ISBN** Edizione [Second edition.] Descrizione fisica 1 online resource (XIX, 415 p. 140 illus., 125 illus. in color.) 001.6420151 Disciplina Soggetti Numerical analysis - Computer programs Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part I: Coding in MATLAB -- 1: Coding Handbook -- 2: MATLAB Style -- 3: Visualization -- 4: Interactive Graphics -- 5: Testing and Debugging -- 6: Classes -- Part II: Applications -- 7: The Double Integrator -- 8: Robotics -- 9: Electric Motors -- 10: Fault Detection --11: Chemical Processes -- 12: Aircraft -- 13: Spacecraft Attitude Control -- 14: Automobiles. Sommario/riassunto Learn from state-of-the-art examples in robotics, motors, detection filters, chemical processes, aircraft, and spacecraft. With this book you will review contemporary MATLAB coding including the latest MATLAB language features and use MATLAB as a software development environment including code organization, GUI development, and algorithm design and testing. Features now covered include the new graph and digraph classes for charts and networks; interactive documents that combine text, code, and output; a new development environment for building apps; locally defined functions in scripts; automatic expansion of dimensions; tall arrays for big data; the new string type; new functions to encode/decode JSON; handling non-English languages; the new class architecture; the Mocking framework; an engine API for Java; the cloud-based MATLAB desktop; the memoize function; and heatmap charts. MATLAB Recipes: A Problem-Solution

Approach, Second Edition provides practical, hands-on code snippets and guidance for using MATLAB to build a body of code you can turn to time and again for solving technical problems in your work. Develop

algorithms, test them, visualize the results, and pass the code along to others to create a functional code base for your firm. You will: Get up to date with the latest MATLAB up to and including MATLAB 2020b Code in MATLAB Write applications in MATLAB Build your own toolbox of MATLAB code to increase your efficiency and effectiveness.