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## *Computer Software*

ALL of the examples shown in the text have been programmed and simulated using MATLAB<sup>®</sup>. A website of these programs, listed by chapter, can be found at

[http://www.buffalo.edu/~johnc/estim\\_book.htm](http://www.buffalo.edu/~johnc/estim_book.htm)

For general information regarding MATLAB or related products, please consult MathWorks, Inc. at

<http://www.mathworks.com>

After the MATLAB execution file is initiated the following prompt should be present:

```
>>
```

Then to see the program outputs, type “help” and the “filename.” For example, for the program `example1_1.m`, type

```
>> help example1_1
```

This will produce the following output for this example:

This example illustrates the basic concept of using linear least squares to estimate the parameters of a simple dynamic system. The program provides a plot of the measurements used in least squares and the best fit.

It has been our experience that to thoroughly understand the intricacies of a subject as diverse as estimation theory, one must learn from basic fundamentals first. Although computer routines can provide some insights to the subject, we feel that they may hinder rigorous theoretical studies that are required to properly comprehend the material. Therefore, we strongly encourage students to program their own

computer routines, using the codes provided from the website for verification purposes only. We have decided not to include a disk of programs with the text so that up-to-date versions of the computer programs can be maintained on the website. The programs have been written so that anyone with even a terse background in MATLAB should be able to comprehend the relationships between the examples in the text and the coded scripts. We hope that the reader will use these programs in the spirit that they are given; to supplement their reading and understanding of the material in printed text in order to bridge the gap between theoretical studies and practical applications.

*Limit of Liability/Disclaimer of Warranty:* The computer programs are provided as a service to readers. While the authors have used their best efforts in preparing these programs, they make no representation or warranties with respect to the accuracy or completeness of the programs. The book publisher (CRC Press), the authors, the authors' employers (University at Buffalo and Texas A&M University), or MathWorks, Inc. shall not be liable for any loss of profit or any other commercial or noncommercial damages, including, but not limited to, special, incidental, consequential, or other damages.