Drifter Data Matlab 07

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end section

Author Details

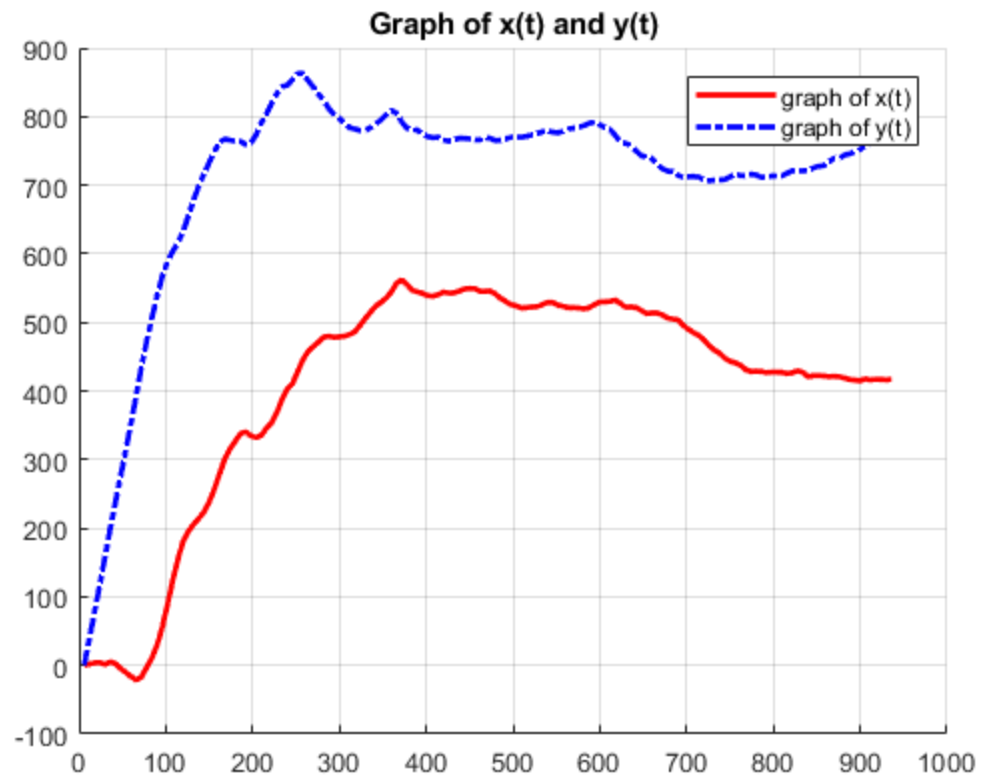Name: Ayush Rout email: axr6077@rit.edu date: 03-03-2018
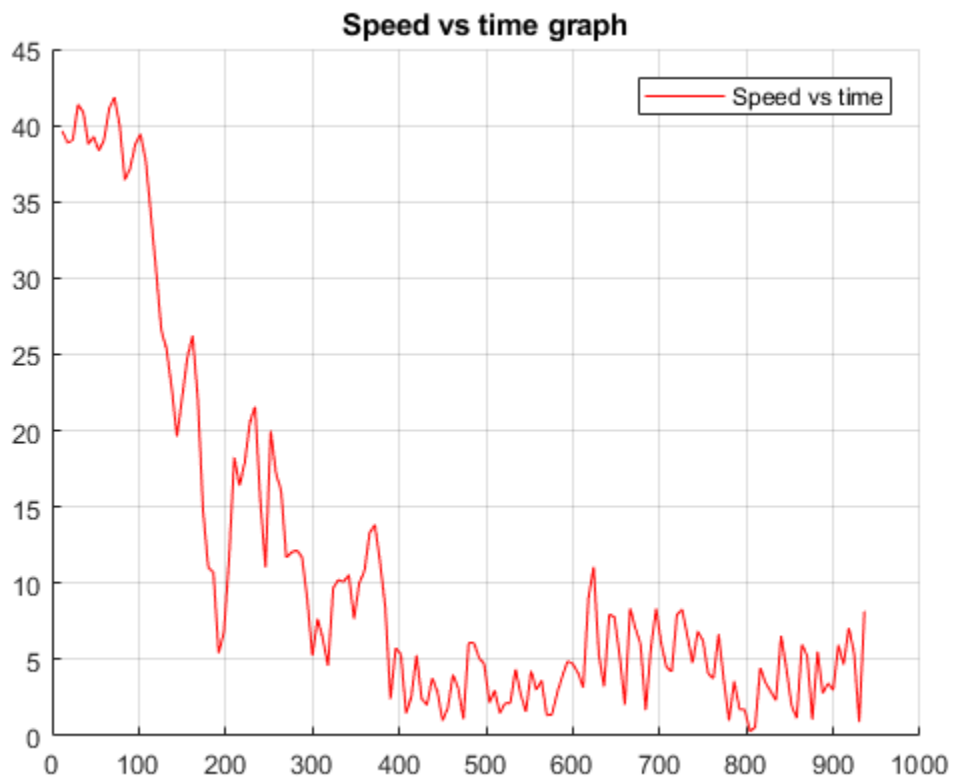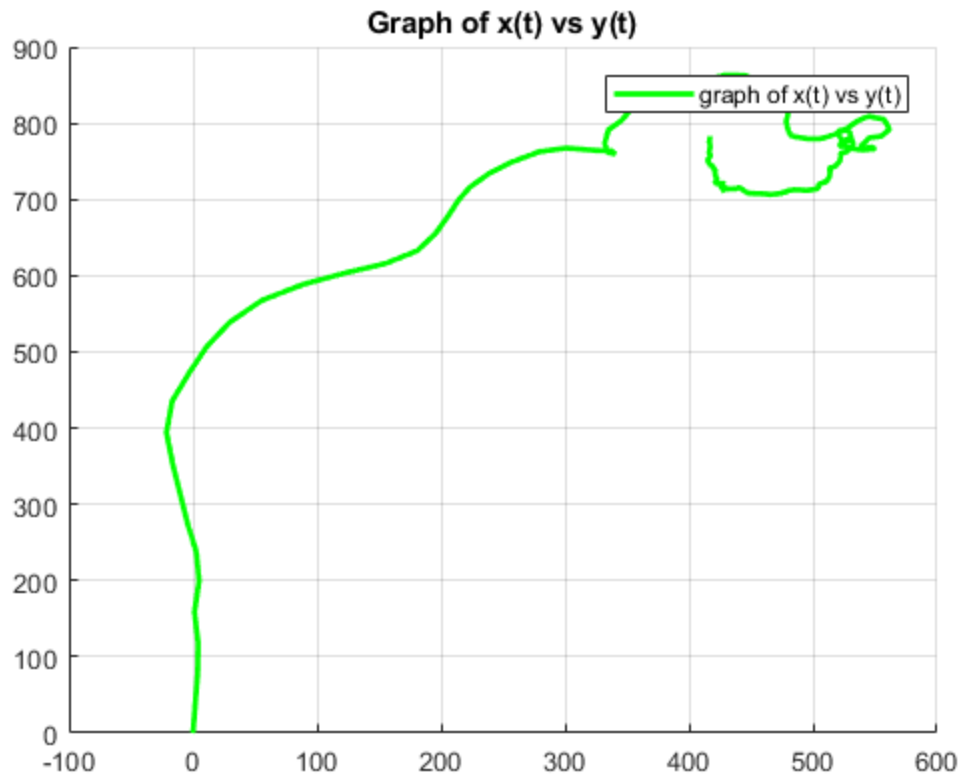
Initialization

```
load("drifterData");
% end section
```

Work

```
figure;
title("Graph of x(t) and y(t)");
hold on;
plot(drifter2time, drifter2x, '-r', 'LineWidth', 2);
plot(drifter2time, drifter2y, '-.b', 'Linewidth', 2);
grid on;
hold off;
legend("graph of x(t)", "graph of y(t)");

figure;
hold on;
plot(drifter2x, drifter2y, '-g', 'Linewidth', 2);
grid on;
hold off;
title("Graph of x(t) vs y(t)");
legend("graph of x(t) vs y(t)");
hold off;


Dx = drifter2x(2:1:end) - drifter2x(1:1:end-1);
Dy = drifter2y(2:1:end) - drifter2y(1:1:end-1);
Ds = sqrt(Dx.^2 + Dy.^2);
DsArray = Ds./6;
speed = sum(Ds);
```

```matlab
figure;
hold on;
newdrifter2time = drifter2time(2:1:end);
plot(newdrifter2time, Ds, '-r' );
legend("Speed vs time");
title("Speed vs time graph");
grid on;
hold off;
% end section
```

Graph of x(t) and y(t)

Graph of x(t) vs y(t)

Speed vs time graph

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