```
clear all;
clc;

a= load ('DataSub8object0position2.txt');
samples= a(:,2);
responses=a(:,1);
[xData, yData] = prepareCurveData( samples, responses );

ft = fittype( '0.5+(1-0.5-l)./(1+exp(-(x-alpha)/beta))', 'independent',
'x', 'dependent', 'y' );

opts = fitoptions( ft );
opts.Display = 'Off';
opts.Lower = [-Inf 0 0];
opts.StartPoint = [0.132903481469417 0.762038603323984 0];
opts.Upper = [Inf 1 1];

[fitresult, gof] = fit( xData, yData, ft, opts );

figure( 'Name', 'Example Psychophysical function fitting' );
h = plot( fitresult, xData, yData );
legend( h, 'responses vs. sample positions', 'fit', 'Location',
'NorthEast' );
% Label axes
xlabel( 'stimulus intensity' );
ylabel( 'Probability of correct response' );
grid on

threshold = fitresult.alpha
beta = fitresult.beta
lapse = fitresult.l
```