design.m

```
function design(D,T,name)
%Plots a design matrix against a time vector with a name.
    %Initialize vectors and variables
   s = size(D, 2);
   slots = 1:(s)*2;
   rslots = find(mod(slots,2)==0);
   lslots = find(mod(slots,2)~=0);
   %Plot the regression variables/signals.
    for i=1:s
        subplot(s,2,lslots(i));
        hold on;
        title(name + " regressor " + i);
        plot(T,D(:,i),'Marker', 'o', 'MarkerSize', 4);
        xlabel("Time(sec)");
       ylabel("Amplitude");
        hold off;
   end
   %Plot the design matrix.
   subplot(s,2,rslots);
   hold on;
   title(name + " Design");
   imagesc(D(:,1:end));
   xlabel("Stimuli");
   ylabel("Stimuli Activity");
   ylim([0,size(D,1)]);
    colormap gray;
   hold off;
end
```

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