

%HERMITE INTERPOLATION FUNCTION

function coeffs = hermiteInterp(Xlst,Ylst,YDlst,YDDLst,polDeg)

Nmat=zeros(polDeg+1);

Nmat(:,1)=Xlst';

Nmat(:,2)=Ylst';

Nmat(:,3)=YDlst';

Nmat(:,4)=YDDLst';

Nmat;

for j=1:polDeg

for k=1:length(Xlst)-j

if Nmat(k,1) ~= Nmat(k+j,1)

Nmat(k,j+2)=(Nmat(k,j+1)-Nmat(k+1,j+1))/((Nmat(k,1)-Nmat(k+j,1)));

end

end

end

coeffs=Nmat(1,2:polDeg+2);

end