Name:

Homework 4
Due 10 October 2019

Use a finite element software package of your choosing to model a center-crack, ensure that your model is sufficiently wide to match the infinite solution. Assume that $E = 70$ GPa and $\nu = 0.3$. Use an analytic solution to calculate K_I for an infinitely wide panel.

Compare various methods we have discussed in class to the analytic solution

- Direct method (both stress field and displacement field)

- Virtual crack closure

- J-integral