Assignment 5

Due: 11 March.

1 Computational Models with Quadratic Growth

- (*15 Points*) Formulate a mathematical model based on a functional equation of the following network problem similar to one discussed in lecture. There are three servers and several client computers connected via communication links. All connections between pairs of clients require two links. The connection between servers also requires two links. Derive an equation for the number of links. Plot your results.

2 Least Squares Fitting

- (*35 Points*) Derive the equations for a linear least squares fitting with perpendicular offsets.