

COMP2411 Assignment 6 Questions

Solutions are to be submitted by Fri June 9. Solutions must be *handwritten*, printouts are not acceptable. You are reminded of the rules concerning collaboration and plagiarism on the Course outline.

This assignment is worth 4% of your final mark.

Prove correctness of the following argument using natural deduction.

$$\frac{\begin{array}{l} \forall X \exists Y (r(X, Y)) \\ \forall Y \exists Z (s(Y, f(Z))) \\ \forall X \forall Y \forall Z ((r(X, Y) \wedge s(Y, Z)) \longrightarrow t(X, Z)) \end{array}}{\forall X \exists Y (t(X, f(Y)))}$$