

COMPUTER SCIENCE TRIPOS Part II – 2017 – Paper 7

13 Principles of Communications (JAC)

- (a) The Transmission Control Protocol (TCP) employs a congestion control algorithm to respond to feedback about network conditions. Describe three common circumstances in which this might not be triggered. [10 marks]
- (b) Wikipedia occasionally suffers from so-called “edit wars”, when different authors successively alter content, backwards and forwards, between two different viewpoints. How would you design a system to stabilize such behaviour by introducing negative feedback controls to slow down or even stop the ability of such authors to make edits to articles in this situation? A qualitative answer identifying the features of such a system will suffice. [10 marks]