

9 Further Human–Computer Interaction (afb21)

- (a) If HCI methods were applied to the design of a programming language and tools, what research questions might be explored, according to the concerns of first wave, second wave, and third wave HCI respectively? [6 marks]
- (b) What empirical methods might be appropriate for studying programming activity, from the perspective of each of these three waves? [3 marks]
- (c) Consider a programming language that has been proposed for the specification of firework displays. Suggest an analytical method that would be appropriate for evaluating and refining the usability of this language and associated tools. [1 mark]
- (d) In terms of the analytical method proposed in Part (c), define the target user, the nature of their task, and several specific usability requirements that would result from that task. [5 marks]
- (e) Choose one requirement identified in Part (d), and describe in detail an empirical approach that you would take to evaluating whether this requirement has been met. [5 marks]