

Quiz 6: Arc Consistency

Quiz 6: Arc Consistency

3/3 points (ungraded)

Consider again the problem of arranging the schedule for an event. There are three time slots: 1, 2, and 3. There are three presenters: **A**, **B**, and **C**. The variables for the CSP will then be **A**, **B**, and **C**, each with domain {1, 2, 3}. The following constraints need to be satisfied:

1. **A**, **B**, and **C** all need to take on different values
2. $A < C$

Enforce consistency for the arc $A \rightarrow C$, and then select which values remain for each variable.

☒ **A**: 1

☒ **A**: 2

☐ **A**: 3

☒ **B**: 1

☒ **B**: 2

☒ **B**: 3

☒ **C**: 1

☒ **C**: 2

☒ $C: 3$



Starting from the result of the previous step, enforce consistency for the arc $B \rightarrow A$, and then select which values remain for each variable.

☒ $A: 1$

☒ $A: 2$

☐ $A: 3$

☒ $B: 1$

☒ $B: 2$

☒ $B: 3$

☒ $C: 1$

☒ $C: 2$

☒ $C: 3$



Starting from the result of the previous step, enforce consistency for the arc $C \rightarrow A$, and then select which values remain for each variable.

☒ $A: 1$

☒ $A: 2$

☐ $A: 3$

☒ $B: 1$

☒ *B*: 2

☒ *B*: 3

☐ *C*: 1

☒ *C*: 2

☒ *C*: 3



Submit

✓ Correct (3/3 points)