

Problem Set 3

COSC 290 Spring 2018

Caio Brighenti

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1 Problem 1: Translating natural language into logic

1.1 DLN 3.145

$$\forall t \in T : [\forall j_1, j_2 \in J : [At(j_1, t) \wedge At(j_2, t) \implies j_1 = j_2]]$$

1.2 DLN 3.146

$$\forall j \in J : [\exists t \in T : \text{scheduledAt}(j, t)]$$

1.3 DLN 3.147

$$\forall t \in T : [At(A, t) \implies \neg(At(A, t+1) \vee At(A, t+2))]$$

1.4 DLN 3.148

$$\exists t_1, t_2, t_3 \in T : [At(B, t_1) \wedge At(B, t_2) \wedge At(B, t_3) \wedge (t_1 \neq t_2 \neq t_3)]$$

1.5 DLN 3.149

$$\forall t_1, t_2, t_3 \in T : [(At(B, t_1) \wedge At(B, t_2) \wedge (t_1 \neq t_2 \neq t_3)) \implies \neg At(B, t_3)]$$

1.6 DLN 3.150

$$\exists t \in T : [\text{scheduledAt}(D, t) \wedge \exists k \in T : [\text{scheduledAt}(E, k) \wedge \forall n \in T : [\text{scheduledAt}(E, n) \implies n \leq k] \wedge t > k]]$$

1.7 DLN 3.151

$$\exists t \in T : [\text{scheduledAt}()]$$

1.8 DLN 3.152

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2 Problem 2: More binary numbers

Replace this with your answer to problem 2. Use `\subsection{}` to separate your answer into parts.

3 Problem 3: Circuits

Replace this with your answer to problem 2. Use `\subsection{}` to separate your answer into parts.

4 Problem 4: More circuits

Replace this with your answer to problem 2. Use `\subsection{}` to separate your answer into parts.