

Deadlock Freedom for Session Types Using Separation Logic

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$$\begin{array}{c} \frac{}{\{x \mapsto t\} \vdash x : t} \text{VAR} \quad \frac{n \in \mathbb{N}}{\emptyset \vdash n : \text{Nat}} \text{NAT} \quad \frac{\Gamma_1 \vdash e_1 : t_1 \rightarrow t_2 \quad \Gamma_2 \vdash e_2 : t_1 \quad \Gamma_1 \cap \Gamma_2 = \emptyset}{(\Gamma_1 \cup \Gamma_2) \vdash e_1 e_2 : t_2} \text{APP} \\[10pt] \frac{\Gamma_1 \vdash e_1 : !t, R \quad \Gamma_2 \vdash e_2 : t \quad \Gamma_1 \cap \Gamma_2 = \emptyset}{(\Gamma_1 \cup \Gamma_2) \vdash \text{send}(e_1, e_2) : R} \text{SEND} \end{array}$$

REFERENCES

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