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广义和游戏中的敌友 Q 学习

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$$B_i(u_1,\ldots,u_w) \geq B_i(u_1,\ldots,u_{i-1},u_i',u_{i+1},\ldots,u_w),$$

(I)

$u\overline{<}\overline{<}$

$$\mathbb{U}$$

$$\mathbb{B}_i(\mathfrak{u}_1,\ldots,\mathfrak{u}_m)\preceq \mathbb{B}_i(\mathfrak{u}_1^{\mathfrak{t}},\ldots,\mathfrak{u}_{i-1}^{\mathfrak{t}},\mathfrak{u}_i,\mathfrak{u}_{i+1}^{\mathfrak{t}},\ldots,\mathfrak{u}_m^{\mathfrak{t}}),\tag{5}$$

$$\mathfrak{u}\mathfrak{u}=-$$

$$\mathbb{B}_i(\mathfrak{u}_1,\ldots,\mathfrak{u}_m)=\sup_{\alpha_1\in\mathbb{V}_1,\ldots,\alpha_m\in\mathbb{V}_m}\mathbb{B}_i(\alpha_1,\ldots,\alpha_m)\quad (3)$$

$$=\cdots=$$

$$\text{LOM:}\mathbb{B}_1=\left[\begin{array}{cc} & \\ -\mathbb{I} & \mathfrak{S} \\ 0 & \mathbb{I} \end{array}\right], \text{column:}\mathbb{B}_3=\left[\begin{array}{cc} & \\ \mathbb{I} & \mathfrak{S} \\ 0 & -\mathbb{I} \end{array}\right].\quad (\P)$$

$$\mathfrak{u}=\left(\right)\mathfrak{u}=\left(\right)\mathbb{U}-\mathbb{U}-\mathbb{U}\mathbb{U}\mathbb{U}$$

$$\mathfrak{b}=\left(\right)\mathfrak{b}=\left(\right)\mathbb{U}$$

$$\mathbb{U}==$$

$$\overline{z} \preceq \mathfrak{z} < \mathbb{U} \mathfrak{u} \mathbb{U}$$

$$\mathfrak{G}_i(\mathfrak{z}^{\mathfrak{t}}\alpha_1,\ldots,\alpha_m)=\mathbb{B}_i(\mathfrak{z}^{\mathfrak{t}}\alpha_1,\ldots,\alpha_m)\\ +\sum_{\mathfrak{z}^{\mathfrak{t}}\in\mathcal{Z}}\mathbb{L}(\mathfrak{z}^{\mathfrak{t}}\alpha_1,\ldots,\alpha_m,\mathfrak{z}^{\mathfrak{t}})\mathfrak{G}_i(\mathfrak{z}^{\mathfrak{t}},\mathfrak{u}_1,\ldots,\mathfrak{u}_m),\tag{2}$$

$$\mathfrak{u}\mathfrak{u}\mathfrak{u}$$

$$\mathbb{U}$$

$$\mathbb{U}$$

$$\mathfrak{G}_i[\mathfrak{z}^{\mathfrak{t}}\alpha_1,\ldots,\alpha_m]:=(\mathbb{I}-\alpha_{\mathfrak{k}})\mathfrak{G}_i[\mathfrak{z}^{\mathfrak{t}}\alpha_1,\ldots,\alpha_m]+$$

$$\alpha_{\mathfrak{k}}\left(\mathfrak{u}_{\mathfrak{k}}+\mathfrak{z}\mu\mathfrak{z}\mu_i(\mathfrak{z}^{\mathfrak{t}}\mathfrak{G}_1,\ldots,\mathfrak{G}_m)\right)\tag{Q}$$

$$=\mathfrak{u}\mathfrak{u}\mathfrak{u}\ \alpha$$

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$$\mathcal{B}_i(\mathfrak{u}_1,\ldots,\mathfrak{u}_m)$$

$$\geq \mathcal{B}_i(\mathfrak{u}_1,\ldots,\mathfrak{u}_{i-1},\mathfrak{u}_i^{\prime},\mathfrak{u}_{i+1},\ldots,\mathfrak{u}_m)$$

$$= \mathcal{B}_i(\mathfrak{b}_1^{\prime},\ldots,\mathfrak{b}_{i-1}^{\prime},\mathfrak{b}_i,\mathfrak{b}_{i+1}^{\prime},\ldots,\mathfrak{b}_m^{\prime})$$

$$\geq \mathcal{B}_i(\mathfrak{b}_1,\ldots,\mathfrak{b}_m).$$

$\mathfrak{u} \mathfrak{b} \mathfrak{u} \mathfrak{b}$

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$$\text{Msg}_I(\alpha, \mathcal{O}_I, \mathcal{O}_S) = \bigvee_{\alpha_I \in \mathcal{V}_I, \alpha_S \in \mathcal{V}_S} \mathcal{O}_I[\alpha, \alpha_I, \alpha_S] \quad (1)$$

$$\sum_{\alpha_I \in \mathcal{V}_I} \mu_I(\alpha_I) \mathcal{O}_I[\alpha_I] = \inf_{\alpha_I \in \mathcal{V}_I} \sup_{\alpha_S \in \mathcal{V}_S} \mu_I(\alpha_I) \mathcal{O}_I[\alpha_I]$$

$$\pi\pi-\pi\pi \geq_{\pi} \pi\pi\pi\pi \leq_{\pi} \pi\pi\pi\pi\pi$$

$$\begin{aligned} \mathcal{W}^{\text{gr}} \mu_i(\mathfrak{z}^i \mathfrak{G}_1^{\cdot \cdot \cdot \cdot} \mathfrak{G}_s) = & \sum \\ \mathbb{A} \in \Pi(\overset{\text{IHSX}}{\mathcal{X}_1 \times \cdots \times \mathcal{X}_r}) \overset{\text{IHS}}{\mathfrak{A}_1^{\cdot \cdot \cdot \cdot} \mathfrak{A}_l} \in \overset{\text{IHS}}{\mathcal{X}_1 \times \cdots \times \mathcal{X}_s} & \mathfrak{x}_1^{\cdot \cdot \cdot \cdot} \mathfrak{x}_r \in \mathcal{X}_1 \times \cdots \times \mathcal{X}_r \\ \mathbb{A}(\mathfrak{x}_1) \cdots \mathbb{A}(\mathfrak{x}_r) \mathfrak{G}_i[\mathfrak{z}^i \mathfrak{x}_1^{\cdot \cdot \cdot \cdot} \mathfrak{x}_r \overset{\cdot \cdot \cdot \cdot}{\mathfrak{A}_1^{\cdot \cdot \cdot \cdot} \mathfrak{A}_l}] & \end{aligned}$$

$$\begin{aligned} \mathbb{B}_I(\mathfrak{u}_1, \dots, \mathfrak{u}_5) &\supseteq \mathbb{B}_I(\mathfrak{u}_1, \mathfrak{u}_5, \dots, \mathfrak{u}_5) \\ &= \mathbb{B}_I(\mathfrak{b}_1, \mathfrak{b}_5, \dots, \mathfrak{b}_5) \\ &\supseteq \mathbb{B}_I(\mathfrak{b}_1, \dots, \mathfrak{b}_5). \end{aligned}$$

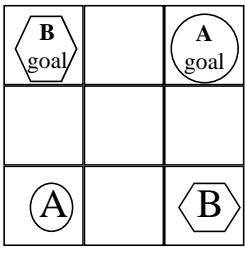
$$U_{\mathbb{A}} = b_b = \mathbb{A}$$

$$\begin{aligned} \mathbb{B}_I(\mathfrak{b}_I^1, \dots, \mathfrak{b}_W) &\supseteq \mathbb{B}_I(\mathfrak{b}_I^1, \mathfrak{b}_S^1, \dots, \mathfrak{b}_W) \\ &= \mathbb{B}_I(\mathfrak{u}_I^1, \mathfrak{u}_S^1, \dots, \mathfrak{u}_W^1) \\ &\supseteq \mathbb{B}_I(\mathfrak{u}_I^1, \dots, \mathfrak{u}_W^1). \end{aligned}$$

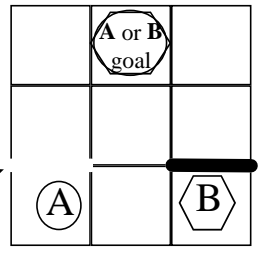
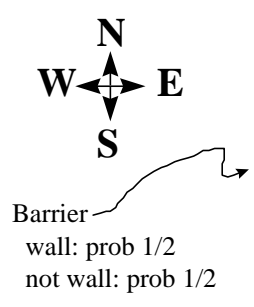
$$|\mathcal{H}^{\mathcal{S}}\mu_I(z', \mathcal{O}_I', \dots) - \mathcal{H}^{\mathcal{S}}\mu_I(z', \mathcal{O}_I'', \dots)| \leq \frac{\max_{\alpha_I', \alpha_I''} |\mathcal{O}_I(z', \alpha_I', \alpha_S) - \mathcal{O}_I(z', \alpha_I'', \alpha_S)|}{\epsilon}.$$

$$\mathbb{U} b = \underline{u} \underline{u} \underline{u} = b b \underline{u}$$

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Grid Game 1



Grid Game 2

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\mathbb{U}

\mathbb{U}

$\mathbb{U} \mathbb{U} \mathbb{U} \mathbb{U}$

\mathbb{U}

$+ \mathbb{U}$

$$\sum$$