Relation U-Net

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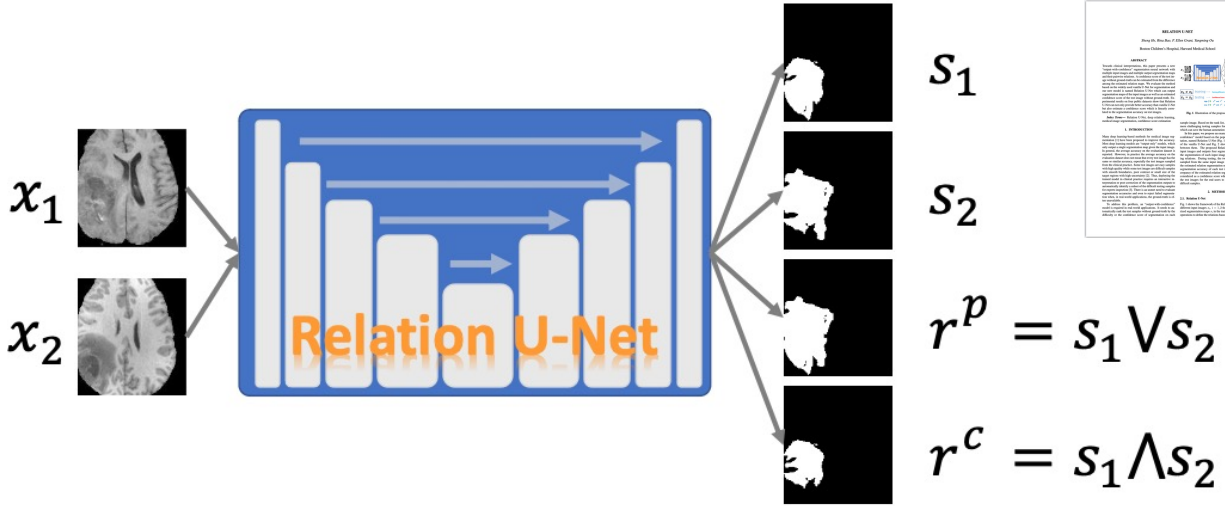Boston Children's Hospital · Harvard MEDICAL SCHOOL

$$s_1$$
$$s_2$$
$$r^p = s_1 \vee s_2$$
$$r^c = s_1 \wedge s_2$$

$x_1 \neq x_2$ training $\longrightarrow$ Training different subnetworks for relations r^p and r^c

$x_1 = x_2$ testing $\longrightarrow$ Confidence Score: $\mathcal{C} = \mathcal{D}(r^p, r^c)$

High $\mathcal{C}$ ⇨ r^p and r^c are consistent for **easy** samples

Low $\mathcal{C}$ ⇨ r^p and r^c are inconsistent for **difficult** samples

Low — Confidence score $\mathcal{C}$ — High