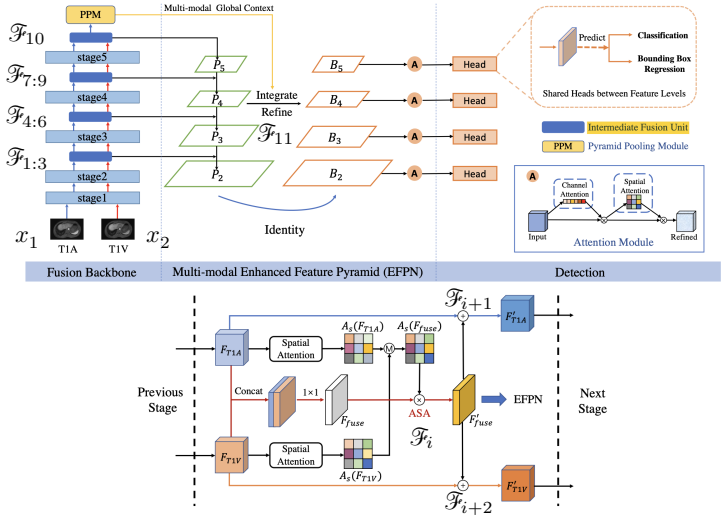
23 Liver Tumor Detection Via A Multi-Scale Intermediate Multi-Modal Fusion Network on MRI Images [23]

Model Architecture



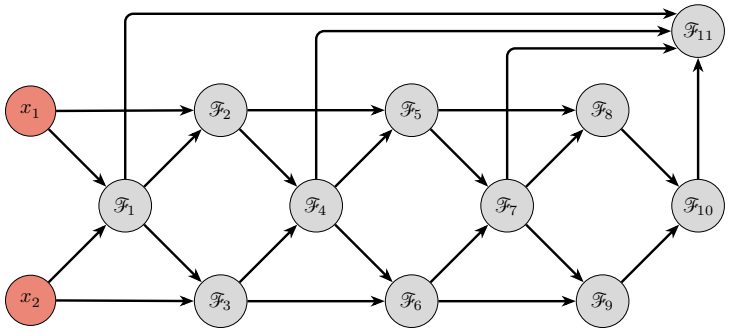
Fusion Formulas

$\mathscr{F}_1 = \mathbb{S}(x_1^{10}, x_2^{10})$ $\quad \mathscr{F}_2 = \oplus(x_1^{10}, \mathscr{F}_1^1)$ $\quad \mathscr{F}_3 = \mathbb{A}(x_2^{10}, \mathscr{F}_1^1)$ $\quad \mathscr{F}_4 = \mathbb{S}(\mathscr{F}_2^{12}, \mathscr{F}_3^{12})$

$\mathscr{F}_5 = \oplus(\mathscr{F}_2^{12}, \mathscr{F}_4^1)$ $\quad \mathscr{F}_6 = \oplus(\mathscr{F}_3^{12}, \mathscr{F}_4^1)$ $\quad \mathscr{F}_7 = \mathbb{S}(\mathscr{F}_5^{18}, \mathscr{F}_6^{18})$ $\quad \mathscr{F}_8 = \oplus(\mathscr{F}_5^{18}, \mathscr{F}_7^1)$

$\mathscr{F}_9 = \oplus(\mathscr{F}_6^{18}, \mathscr{F}_7^1)$ $\quad \mathscr{F}_{10} = \mathbb{S}(\mathscr{F}_8^9, \mathscr{F}_9^9)$ $\quad \mathscr{F}_{11} = \boxplus(\mathscr{F}_1^0, \mathscr{F}_4^0, \mathscr{F}_7^0, \mathscr{F}_{10}^0)_{\rightarrow}$

Fusion Graph Representation



Fusion Analysis

How Many: Single or Multiple?	Multiple, 11
Number of Fusion Flows	1
Multiple Type Sudden, Gradual or Multi-Flow?	Sudden
|Sudden| Synchro?	Yes