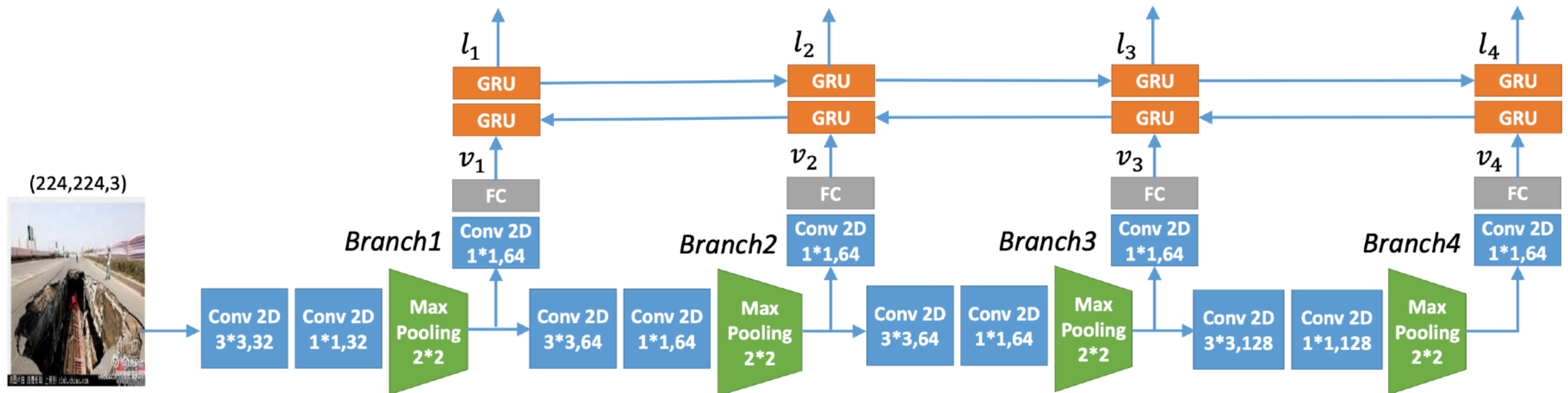


Methodology...

Pixel Domain Sub-network

- Pixel domain sub-network to extract features of semantic level images $\rightarrow \{l_t\}, t \in [1,4]$



Methodology....

Fusion Sub-network

- Frequency domain sub-network (physical level): l_0
- Pixel domain sub-network (semantic level): $\{l_1, l_2, l_3, l_4\}$
- via attention mechanism, and the enhanced image representation is computed as follows:

$$\bullet \quad F(l_i) = v^T \tanh(W_f l_i + b_f), i \in [0,4] \quad , \quad \alpha_i = \frac{\exp(F(l_i))}{\sum_i \exp(F(l_i))} \quad , \quad u = \sum_i \alpha_i l_i$$