



Alice:  $D_1^1$

Bob:  $D_2^1$

Charlie:  $D_3^1$

...

**Blood test results:**

$$D^1 \in \mathbb{R}^{n \times d_1}$$



Alice:  $D_1^2$

Bob:  $D_2^2$

Charlie:  $D_3^2$

...

**CT images:**

$$D^2 \in \mathbb{R}^{n \times d_2}$$



Alice:  $D_1^3$

Bob:  $D_2^3$

Charlie:  $D_3^3$

...

**The degree of  
liver cancer:**

$$D^3 \in \mathbb{R}^{n \times d_3}$$