

$$\bar{r}=\bar{v}\times\bar{o}$$

$$\bar{s}=\bar{o}\times\bar{u}$$

$$\bar{n}=\bar{u}\times\bar{v}$$

$$k_r=\bar{r}\cdot(\bar{C}_a-\bar{V})$$

$$k_s=\bar{s}\cdot(\bar{C}_a-\bar{V})$$

$$k_n=\bar{n}\cdot(\bar{C}_a-\bar{V})$$

$$x(\theta,v)=\frac{\bar{r}\cdot D_A(\theta,v)+k_r\delta(\theta,v)}{\bar{n}\cdot D_A(\theta,v)+k_n\delta(\theta,v)}$$

$$y(\theta,v)=\frac{\bar{s}\cdot D_A(\theta,v)+k_s\delta(\theta,v)}{\bar{n}\cdot D_A(\theta,v)+k_n\delta(\theta,v)}$$

where

$$\bar{v}\in\mathbb{R}^3$$

$$\bar{o}\in\mathbb{R}^3$$

$$\bar{u}\in\mathbb{R}^3$$

$$\bar{V}\in\mathbb{R}^3$$

$$\bar{C}_a\in\mathbb{R}^3$$

$$\theta\in\mathbb{R}$$

$$v\in\mathbb{R}$$

$$D_A\in\mathbb{R},\mathbb{R}\rightarrow\mathbb{R}^3$$

$$\delta\in\mathbb{R},\mathbb{R}\rightarrow\mathbb{R}$$