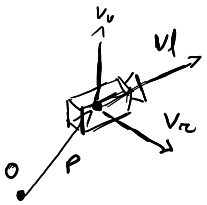

The camera has the vectors Vf, Vu and Vr (Forward, Up and Right) and is located at P. The 3 direction vectors form an orthonormal base in R3. Rays are "shot" from P in the general direction of Vf. So we have...

$$\overrightarrow{ray} : (r_x, r_y, r_z) \in R^3, \alpha = \langle \vec{ray}, \vec{Vu} \rangle, \beta = \langle \vec{ray}, \vec{Vr} \rangle$$

$$\overrightarrow{ray} = V_f + V_u * \sin\alpha + V_r * \cos\beta$$