$$d\vec{F}_q = k\frac{q\cdot dQ}{r_{12}^2}\hat{r}_{21} \tag{1}$$
$$= k\frac{q\cdot \lambda dL}{r_{12}^2}\hat{r}_{21} \tag{2}$$
$$= k\frac{q\cdot \lambda dL}{L^2+x^2}\hat{r}_{21} \tag{3}$$
$$\tag{4}$$

$$dF_x = dF\frac{x}{\sqrt{x^2+L^2}} \tag{5}$$
$$dF_y = dF\cdot\frac{L}{\sqrt{x^2+L^2}} \tag{6}$$