Let V be the set of all continuous functions $f : [0, 1] \to \mathbb{R}$, differentiable on $(0, 1)$, with the property that $f(0) = 0$ and $f(1) = 1$. Determine all $\alpha \in \mathbb{R}$ such that for every $f \in V$, there exists some $\xi \in (0, 1)$ such that

$$f(\xi) + \alpha = f'(\xi).$$