Seja $f = (+\hat{+}) \circ \langle \text{head}, (++\ \text{" "}) \circ \text{last} \rangle$

Então, $\text{short} = f \circ \text{words}$

Simplificando a expressão de f:

$$
\begin{aligned}
& (+\hat{+}) \circ \langle \text{head}, (++\ \text{" "}) \circ \text{last} \rangle \\
& = && \text{(Ig. Ext., Def-Comp, Def-Split, Uncurry)} \\
& (++)\ (\text{head}\ x)\ ((++\ \text{" "}) \circ \text{last}\ x) \\
& = && (?) \\
& ((++) \circ (++\ \text{" "}))\ (\text{head}\ x)\ (\text{last}\ x) \\
& = && \text{(Uncurry, Def-Split, Def-Comp, Ig. Ext.)} \\
& \text{uncurry}\ ((++) \circ (++\ \text{" "})) \circ \langle \text{head}, \text{last} \rangle
\end{aligned}
$$

Logo, $\text{short} = \text{uncurry}\ ((++) \circ (++\ \text{" "})) \circ \langle \text{head}, \text{last} \rangle \circ \text{words}$