Izhikevich Model

u' = a(bv - u)

 $v' = 0.04v^2 + 5v + 140 - u - I$

if $v \ge 30 \,\mathrm{mV}$, then $\begin{cases} v \leftarrow c \\ u \leftarrow u + d \end{cases}$

$$40 - i$$