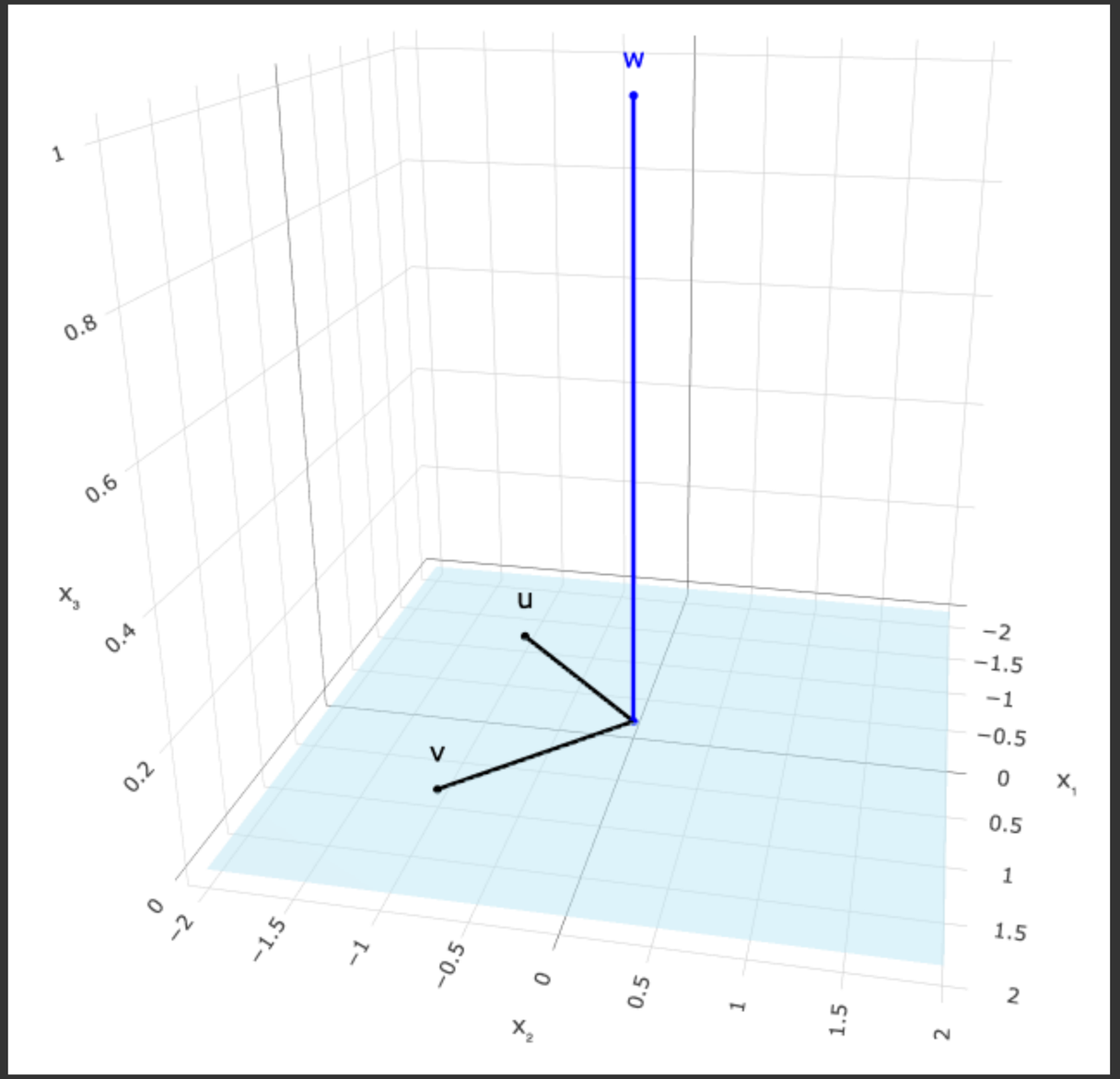
linear independence and spanning vectors

- Since $\vec{w}$ is not in $span(\vec{u}, \vec{v})$, $(\vec{u}, \vec{v}, \vec{w})$ is linear independent.



rank