ABSTRACT
Entrepreneurs and start-up founders occupying innovation spaces and hubs often find themselves inside a filter bubble or echo chamber, where like-minded people tend to come up with similar ideas and recommend similar approaches to innovation. Algorithmic culture embedded in digital technology contributes to building these bubbles. Yet, genuine innovation thrives on social inclusion fostering a diversity of ideas. To escape these echo chambers, we propose to design and test a ‘skunkworks finder’ that will provide the possibility to discover marginalised networks and innovation spaces in the creative fringe.

KEYWORDS
innovation spaces, innovation hubs, digital participation, creative fringe, marginalised people, social inclusion

1 INTRODUCTION
Innovation spaces and hubs provide local and regional opportunities for people to assemble and collaborate on creative endeavours and ideas. Casual conversations in between ping pong matches or while sitting on bean bags establish a somewhat relaxed atmosphere where creative ideas can thrive. Entrepreneurship and the resulting founding of start-ups are intricately linked to these innovation and incubation spaces. As a result, they have seen increased attention, support, and funding from both public and private sources across Australia and internationally.

2 PROBLEM STATEMENT
With the growing interest in setting up innovation and incubation spaces, an often missed challenge is socio-cultural animation and curation. Getting the mix just right is based on the current first degree connections sorted by the number of shared interests. Digital technology and social media support self-sorting phenomena with the result of individuals having trouble escaping their own filter bubble. This risks diminishing the benefits of using digital technology and the internet as users lose access to the long tail that is meant to provide diversification to mainstream products and services [1]. To make matters worse, government support generally focuses on innovation spaces with STEM topics, which risks marginalising people from non-STEM backgrounds. It appears the arts, design, social sciences, and humanities have been relegated to the “creative fringe” [2,3], as have groups that do not identify with “innovation” or “startup” labels. Foth [2] emphasises the importance of considering these groups and the places they meet at, which he refers to as skunkworks [2]. Evidence shows that including diverse people and groups in innovation proves beneficial for both the creative processes and economic outcomes [4, 5].

3 PROPOSITION
This study focuses on finding new ways of providing people with visual opportunities to escape their filter bubble and find possible skunkworks spaces. The study’s aim is twofold: First, we want to give the start-up community an ability to gauge their own lack of diversity relative to opportunity spaces around them. Second, we want to enable discovery and exploration of new spaces for creativity and innovation. A user can map innovation spaces relative to their local position. Familiar places that match their usual interests appear, complemented by suggested new places that lie dormant in the undercurrent of the innovation ecosystem. We note that the same spaces considered mainstream by some are dormant to others, and vice versa. Giving users access to filter options will enable them to navigate a more inclusive picture of their local innovation ecology.

4 APPROACH
Visualising network graphs of innovation spaces requires the use of big data. The study will examine APIs of social media platforms in order to retrieve appropriate datasets. For instance, LinkedIn can provide data to create a network graph displaying current first degree connections sorted by the number of shared connections. When this social data is correlated with location-based data from MeetUp, we can identify new ways to discover innovation spaces by eliminating mainstream knowledge (via strong bonds) and listening for weak signals at the periphery and fringe of the network graph. Users will gain benefits from being able to tap into a more inclusive rendering of the local innovation ecosystem and translate insights into diversity dividends.

REFERENCES