

Background

Earth's changing climate is exacerbating bushfires, as evidenced by Australia's devastating 2019/20 bushfire season.

The Frontier Development Lab (FDL)
AusNZ approached us to provide the high-performance computing (HPC) service and support for their Data Quest 2020 - a research sprint to incorporate artificial intelligence (AI) into firefighting.

Challenges

The complexity of predicting bushfire behaviour, coupled with obsolete tools that require manual input, makes predicting and preventing modern day bushfires arduous tasks.

Solutions

As a proud partner we supplied our HPC resources and data science expertise, enabling the Data Quest 2020 researchers to efficiently test AI-powered systems for detecting, monitoring and modelling bushfires using satellite data.

Results

Our tailored solution enabled terabytes of satellite imagery data to be leveraged.

The sprint succeeded in developing a number of innovative AI solutions for bushfire prevention and management.

The results included clear, demonstrable pathways and deployable tools for future use by fire experts and first responders.