# OUTSMARTING BUSHFIRES WITH ARTIFICIAL INTELLIGENCE.

## 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.

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