

Is Anybody There?

Predicting Dwelling Occupancy on Census Night

Using Admin Data and Machine Learning

Sean Buttsworth, Joel Liffner, Vanessa Haller-Bull (QUT),
James Bailie

Australian Bureau of Statistics
Informing Australia's important decisions



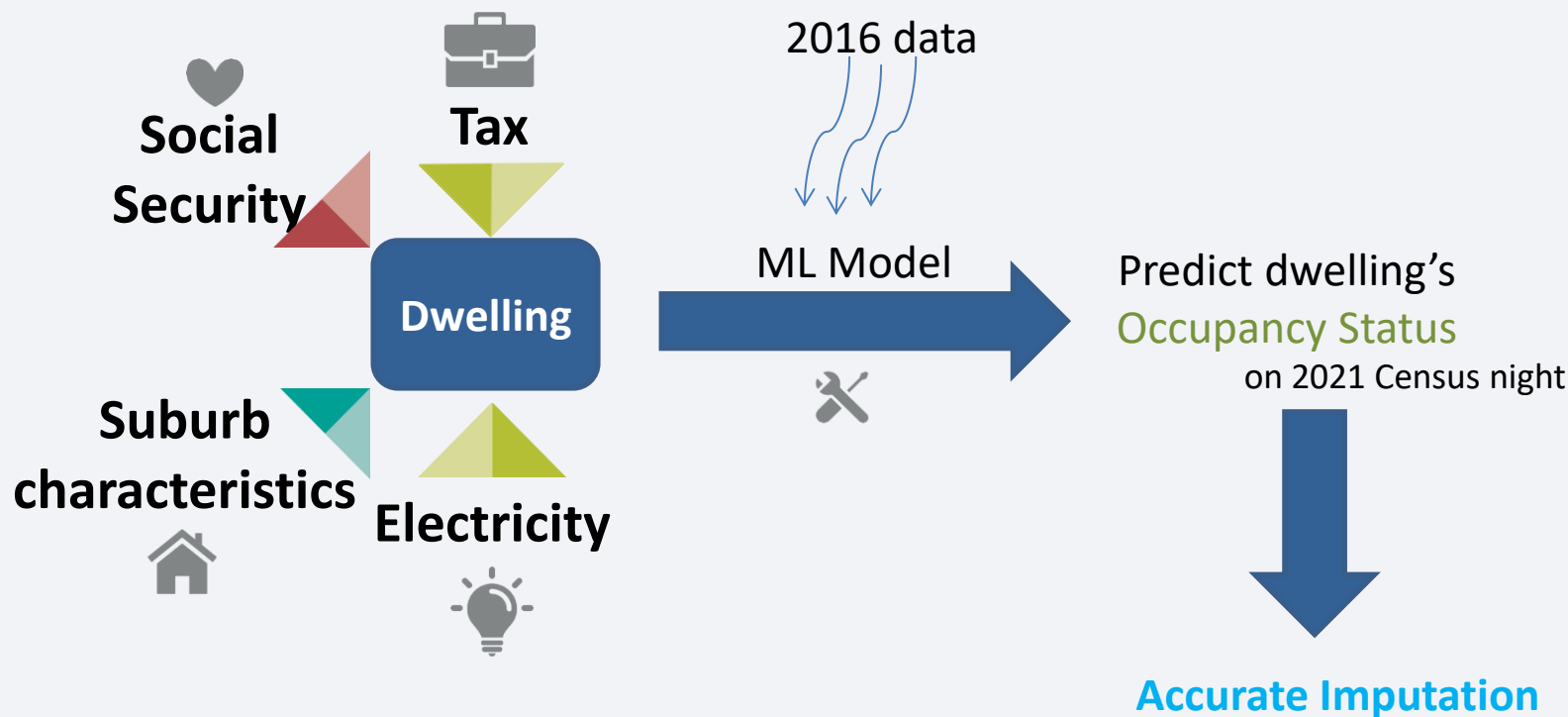


In 2016, Australia
had too many
imaginary friends.

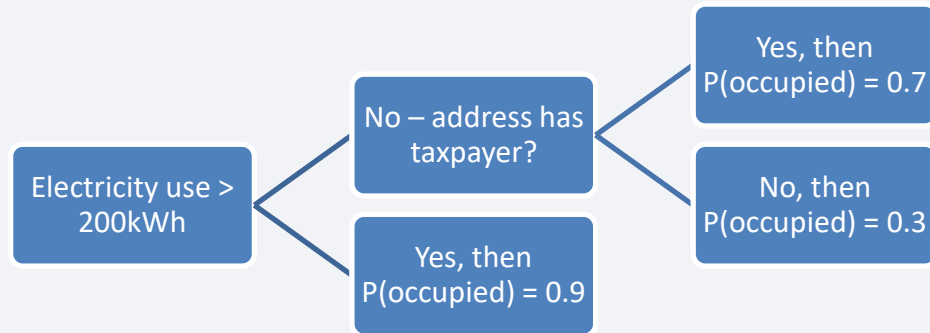
A Story



- ▶ Building public trust and ensuring privacy are fundamental to this work.
- ▶ Before implementation, this project will be evaluated in the 2021 Census Privacy Impact Assessment.
- ▶ We will communicate updates through abs.gov.au



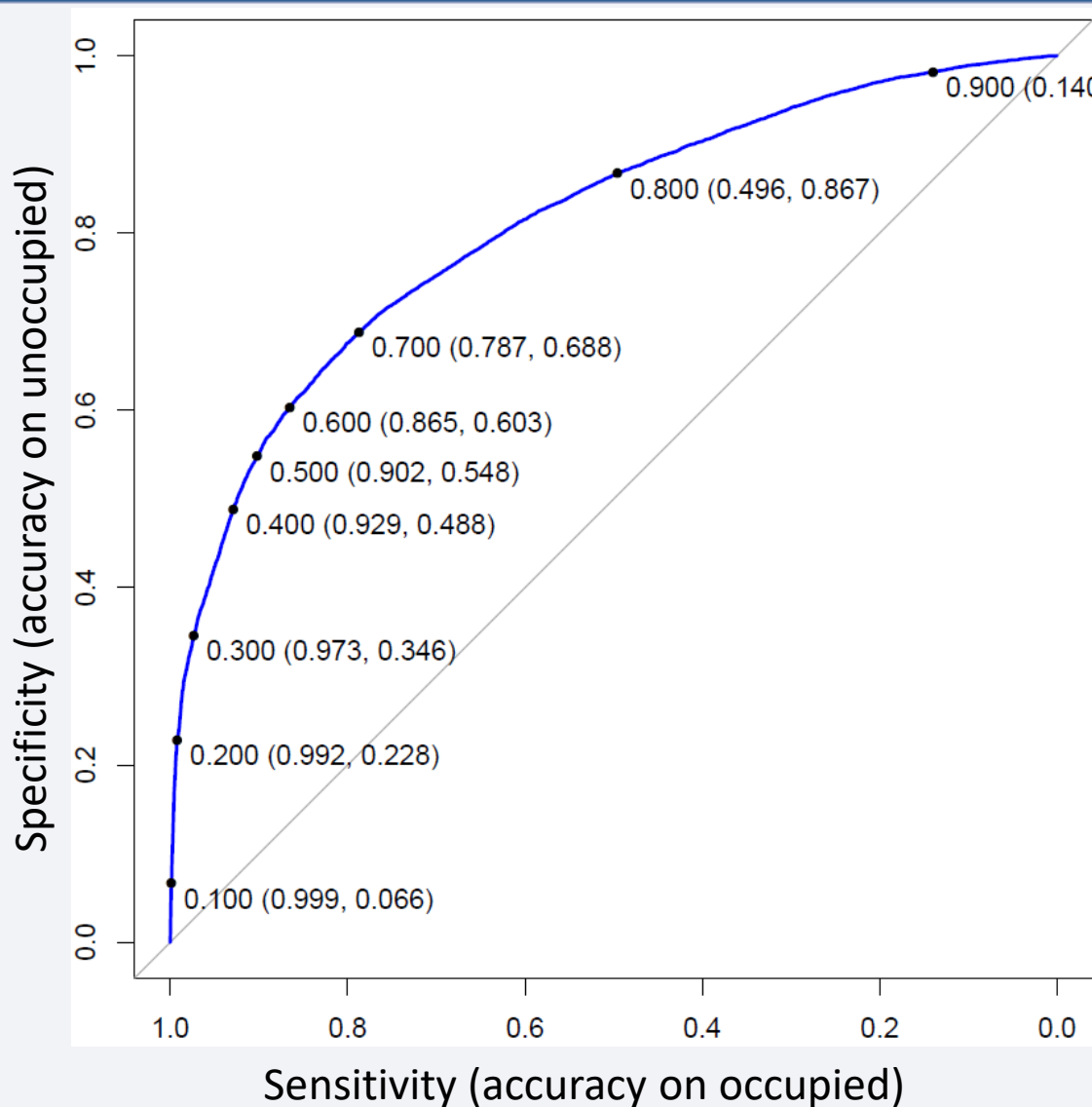
- ▶ ~~Decision tree method~~



- ▶ ~~Boosted decision tree method~~

- ▶ Gradient boosted decision tree method

Some initial results (subject to change)



Tasmanian,
non-responding
dwellings

Questions?

Thank you.

Sean Buttsworth, Joel Liffner,
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