



T.R.A.V.I.S.

Television Remote and Voice Interpretation System

Ann Sophie Abrahamsson, Nathan Banner, Lillian Gwendolyn, Katy Johnson,
Aidan Martens, Heath Robinson, Kanybek Tashtankulov



What is TRAVIS?

- Simplified TV remote to make channel surfing more accessible.
- Uses voice recognition software to listen and respond to the user's commands if buttons are out of reach.



Simple Design

- 8 large, easy-to-press buttons.
- TRAVIS button toggles voice activated software on and off.
- LED lights up when listening.
- Simplified, ergonomic design.
- Button layout matches your remote.

Easy Setup

- TRAVIS asks for TV manufacturer when first powered on.
- Model remembered thereafter.
- Ideal for those not tech savvy or frustrated with modern remotes.

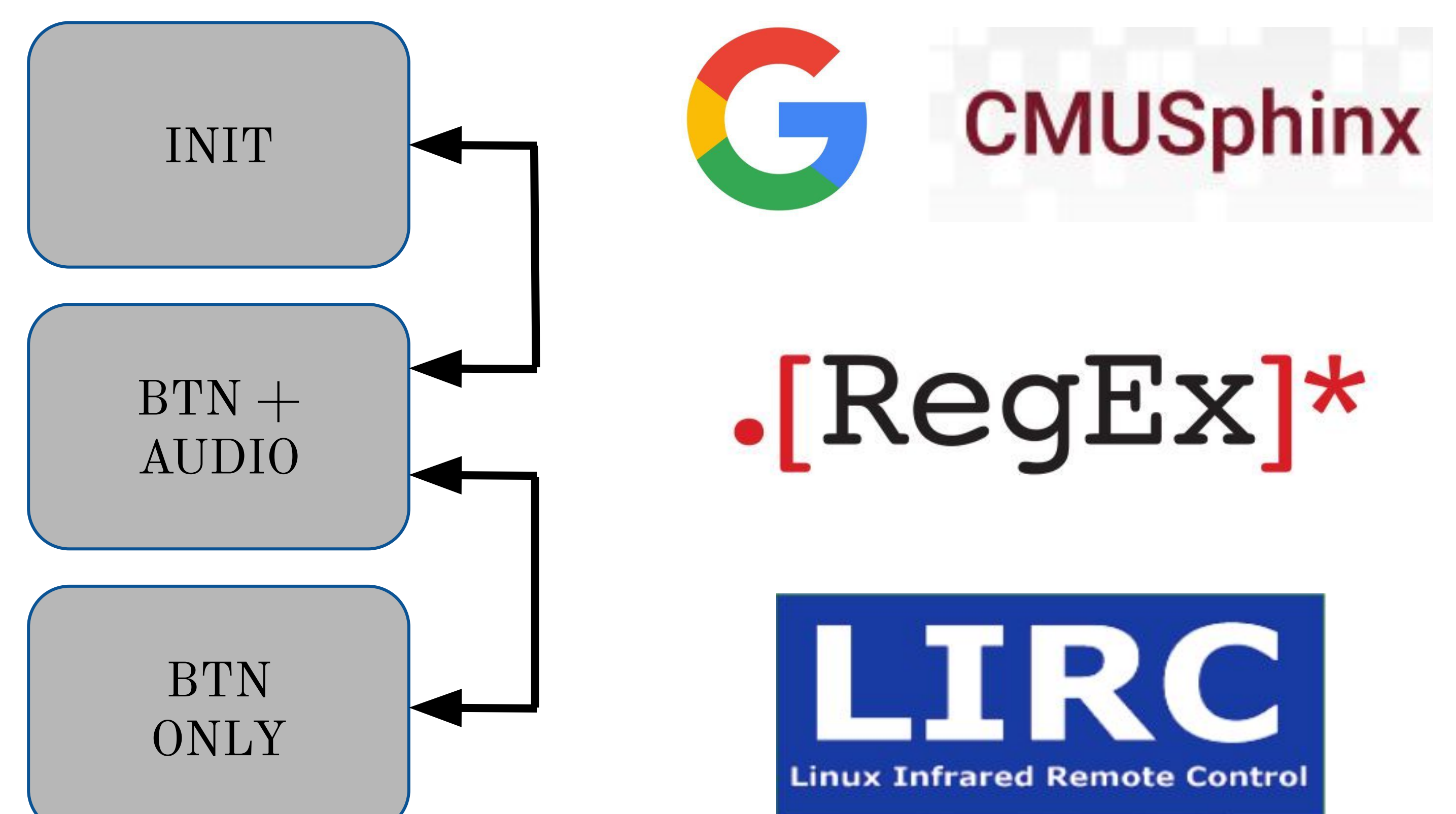
Commands Available

"TRAVIS, initialize"
 "TRAVIS, turn power on/off"
 "TRAVIS, change input/source..."
 "TRAVIS, change channel (to)..."
 "TRAVIS, channel up/down"
 "TRAVIS, mute"
 "TRAVIS, turn volume up/down"
 "TRAVIS, assign..."

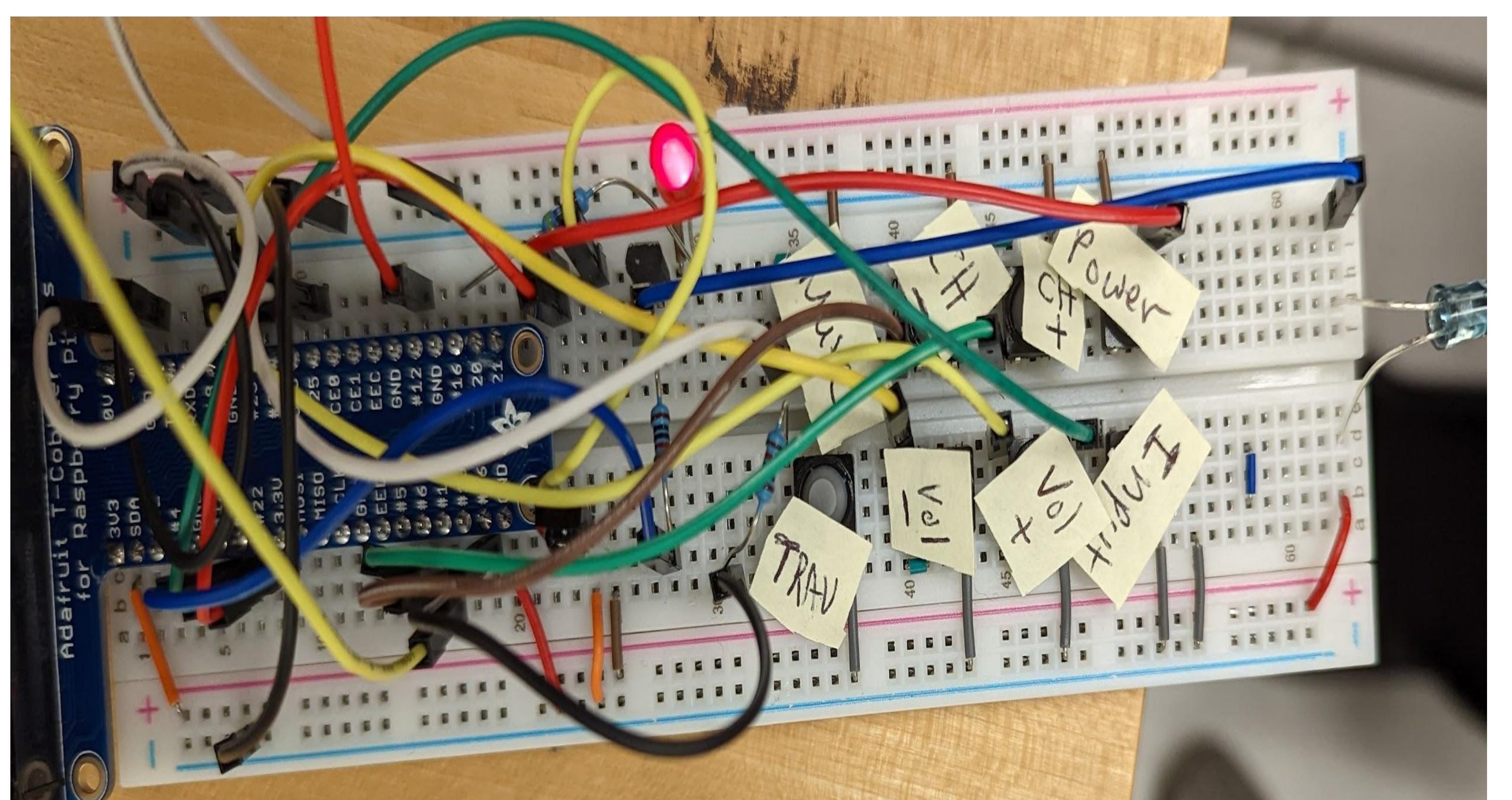
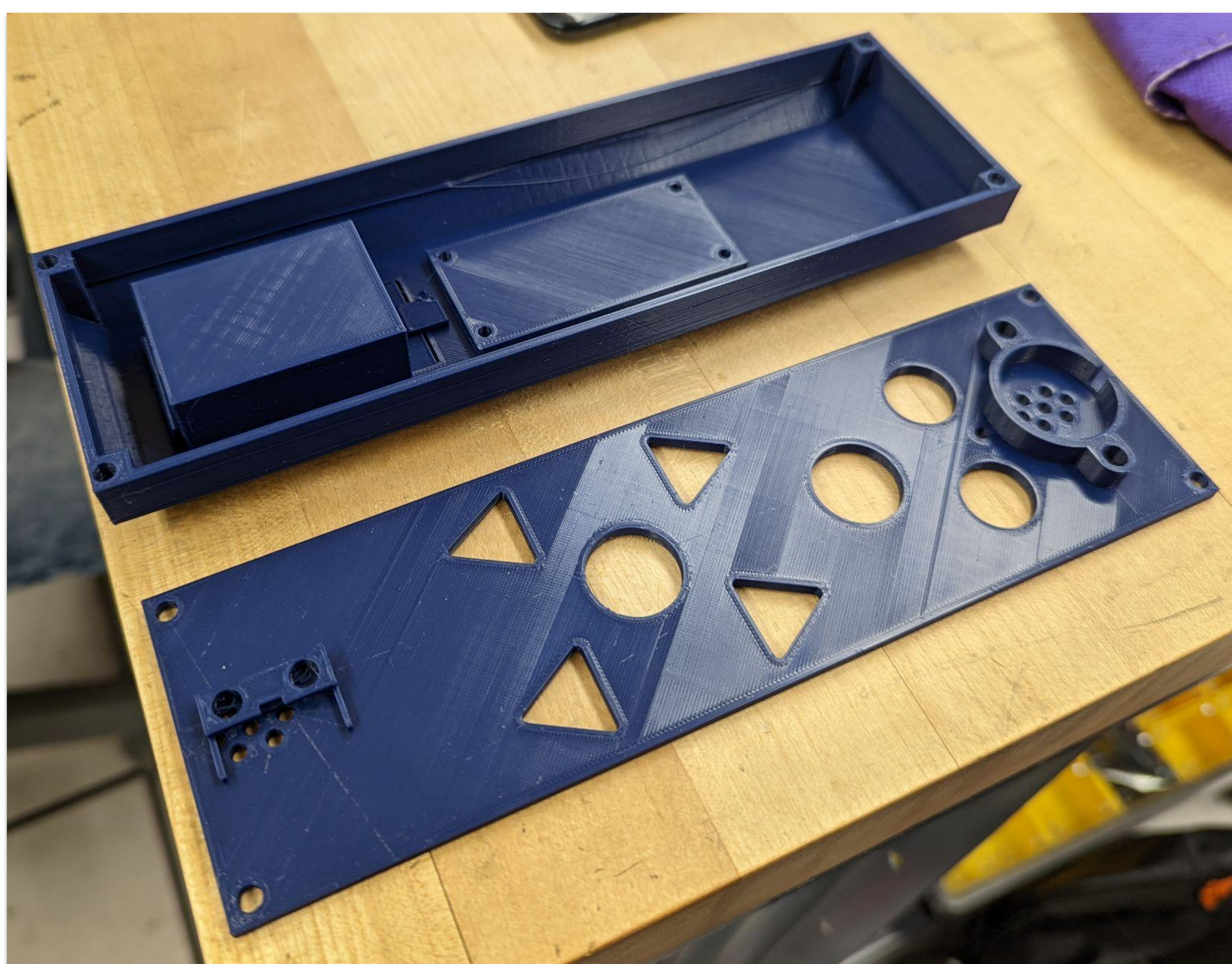
- ★ Every button bigger than a quarter!
- ★ Microphone and speaker placed like a phone!

What Makes TRAVIS Tick?

- Runs on a Raspberry Pi Zero 2 W - small form factor and high power gives quick audio feedback.
- Google speech processing available with wifi connection.
- CMUSphinx speech processing available for offline use.
- Runs speech through REGEX to determine command.
- Successful command sent through LIRC to pass signals to TV.



3D Printed Design



- Key Features
 - Removable battery door for replacing 9V battery.
 - Simple to manufacture design, needs only screws.

Acknowledgements

- ❖ Thank you to Dr. David C. Harrison for valuable guidance and feedback, as well as finding us a TV to work with.