

GEOGUESSR

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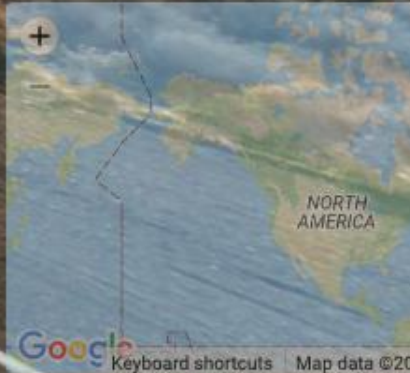
NE E

MAP

United States

RO

5



PLACE YOUR PIN ON THE M

Project Motivations

- ✦ GeoGuessr experts
 - ✦ Are they really that good?
- ✦ Test geography skills
- ✦ Image recognition
- ✦ Google API

North
Pacific
Ocean



19,798 points

LIFETIME EXPERIENCE

+ 99 XP

LVL 6

171 / 190

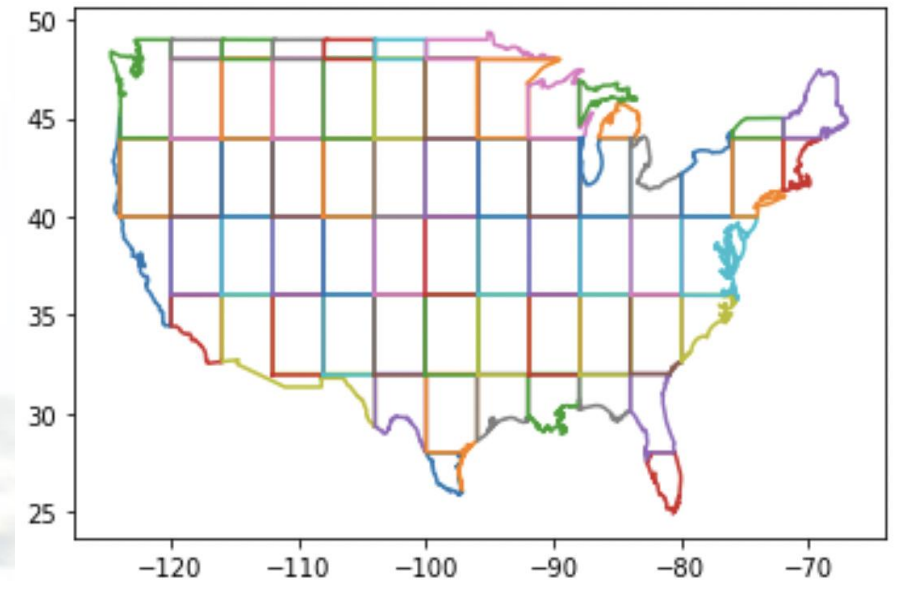
Goals

- ✦ Scrape images using Google Street View API
- ✦ Build a convolutional network architecture
- ✦ Distinguish regions of the United States
- ✦ Create a model to beat the average player



Strategy

- ✦ Partition the United States into 65 grids
- ✦ Scrape 10 locations per section (constrained by \$300 Google credit limit)
- ✦ Load training/testing images into arrays with their corresponding grid number into a separate pair of arrays
- ✦ Construct a convolutional neural network to detect single features within the entire image



Google Maps API

- Google Maps Street View was used for the data set
- This required us to obtain an API key from the Google Cloud service
- In doing this we were able to pull images taken directly from Google Maps at any location





The Data

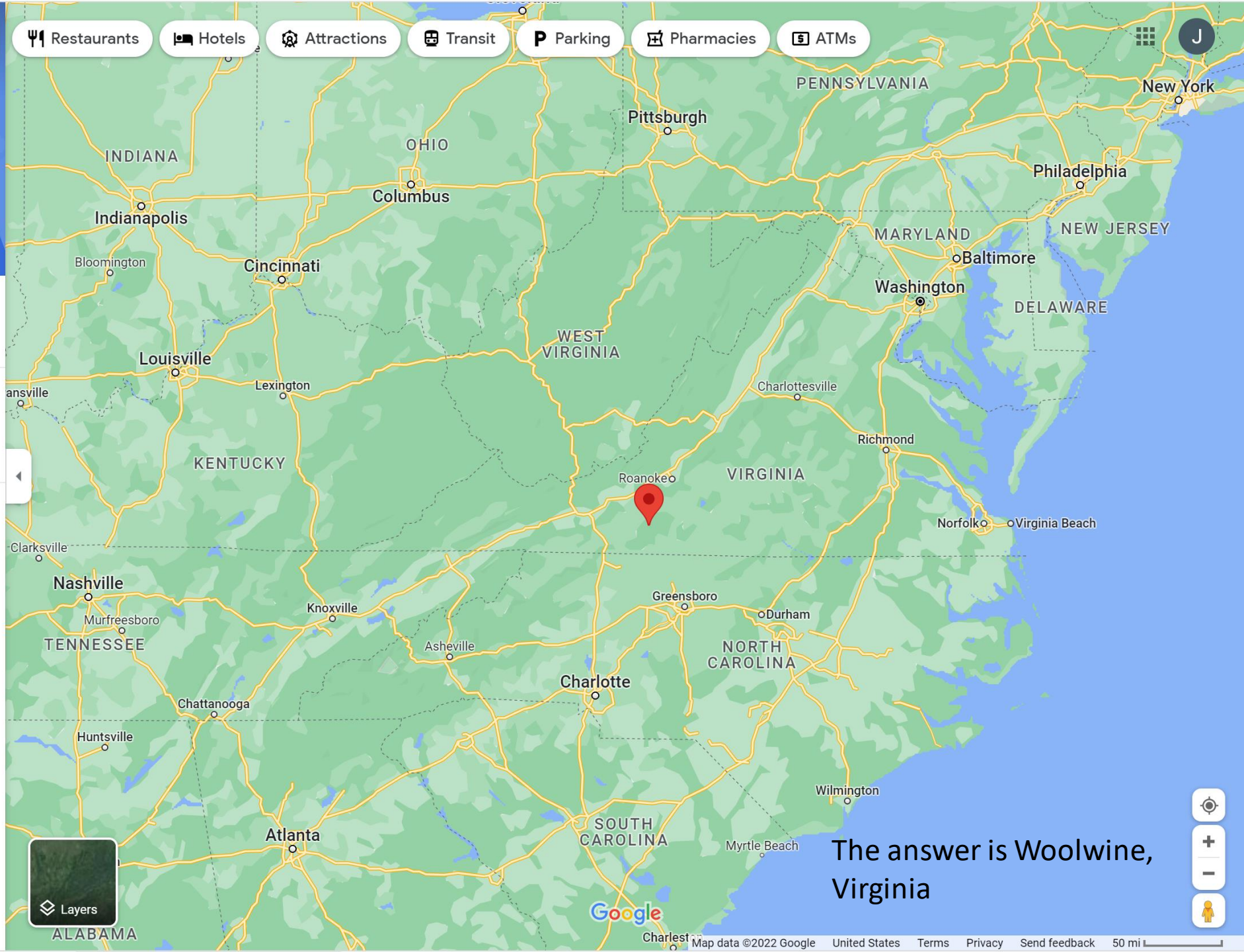
- Using Google Maps, we were able to pull 10 random image sets from within a specified latitude and longitude range such as shown here.
- Each location is within the continental United States
- Each location chosen has three images associated with it.
- The difficulty in this problem lies in situations that can be seen here.
- Any idea where these images are from?

36°49'08.5"N 80°12'58.3"W

36.819037, -80.216183

- Directions
- Save
- Nearby
- Send to your phone
- Share

- 6040 Charity Hwy, Woolwine, VA 24185
- RQ9M+JG8 Charity, Virginia
- Add a missing place
- Add your business
- Add a label



The answer is Woolwine, Virginia

Network Architecture

- ✦ Convolutional neural network
- ✦ 241,000 parameters

