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Projects in ML – Fish Species Identification

Dr. Kunda

Assignment 4

1. Description of Dataset

We researched the most common genomes of fish and found that 94% of fish are categorized under 8 general families, so we chose this as a starting place for our species classification. Having selected these 8 families to shape our target concept, we utilized a variety of recreational fisherman resources online to collect 30-80 pictures of each fish type (based on what data was available) until we ended up with right around 500 images to be used for this assignment. Most of these photos had the fish fairly clear to the camera, held up in “trophy” poses, although we included pictures of lower qualities/different angles as well to maximize our training variety.

**>Insert description of how images were split into training/testing/validation**

1. Neural Network Experimentation, Analysis, and Results
2. MNIST Experiments
3. **Hyperparameter settings fixed**
4. **Hyperparameter that changed**
5. **Specs**
6. **Plot of accuracies**
7. **Interpretation/Discussion of plot**
8. Our Experiments
   1. **Hyperparameter settings fixed**
   2. **Hyperparameter that changed**
   3. **Specs**
   4. **Plot of accuracies**
   5. **Interpretation/Discussion of plot**