

Figure 1: A heatmap visualization of the cosine similarity matrix for 100 different categories. The categories are listed along the top and left axes, including items like 'apple', 'aquarium_fish', 'baby', 'bear', 'beaver', 'bee', 'beetle', 'bicycle', 'bottle', 'bowl', 'boy', 'bridge', 'bus', 'butterfly', 'camel', 'can', 'castle', 'caterpillar', 'cattle', 'chair', 'chimpanzee', 'clock', 'cloud', 'cockroach', 'couch', 'crab', 'crocodile', 'cup', 'dinosaur', 'dolphin', 'elephant', 'flatfish', 'forest', 'fox', 'girl', 'hamster', 'house', 'kangaroo', 'keyboard', 'lamp', 'lawn_mower', 'leopard', 'lion', 'lizard', 'lobster', 'man', 'maple_tree', 'motorcycle', 'mountain', 'mouse', 'mushroom', 'oak_tree', 'orange', 'orchid', 'otter', 'palm_tree', 'pear', 'pickup_truck', 'pine_tree', 'plain', 'plate', 'poppy', 'porcupine', 'possum', 'rabbit', 'raccoon', 'ray', 'road', 'rocket', 'rose', 'sea', 'seal', 'shark', 'shrew', 'skunk', 'skyscraper', 'snail', 'snake', 'spider', 'squirrel', 'streetcar', 'sunflower', 'sweet_pepper', 'table', 'tank', 'telephone', 'television', 'tiger', 'tractor', 'train', 'trout', 'tulip', 'turtle', 'wardrobe', 'whale', 'willow_tree', 'wolf', 'woman', and 'worm'.

The color scale represents the cosine similarity value, ranging from 0.0 (dark blue) to 1.0 (dark red). The diagonal elements, representing the similarity of an item to itself, are all 1.0 (dark red). The matrix is symmetric, indicating that the similarity between two items is the same regardless of the order. The heatmap shows various clusters of items with high similarity, such as 'apple' and 'pear' (0.91), 'beetle' and 'butterfly' (0.89), 'cat' and 'cat' (0.99), and 'dog' and 'dog' (0.99).