Assignment I:

You have been tasked with creating an image classification model using **SqueezeNet** (Figure 1.), to classify cars and trucks in the Cars-vs-Trucks dataset. Your goal is to create a model that achieves high accuracy on the validation set, while also being efficient in terms of model size and computational resources.

1. Download the Cars-vs-Trucks dataset and split it into training and validation sets.
2. Implement SqueezeNet architecture in **Keras**, following the original paper. You can use the code provided earlier in the last lecture (GitHub repo.) or use any other implementation you prefer.
3. Compile the model with an appropriate loss function and optimizer.
4. Train the model on the training set for a number of epochs, monitoring the validation accuracy. Experiment with different values for the learning rate and batch size to find the optimal hyperparameters.
5. Evaluate the model on the validation set and report the accuracy.
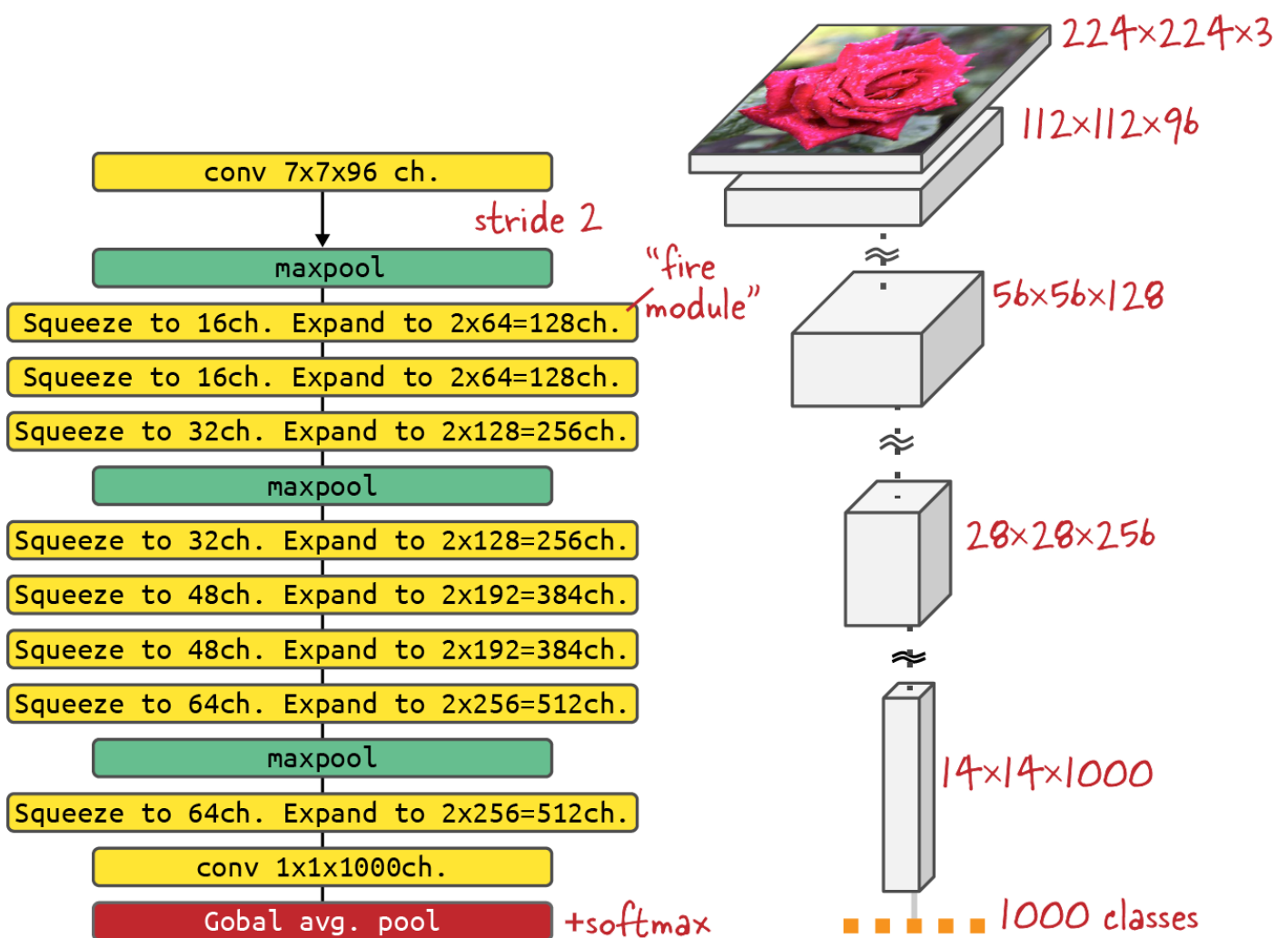6. Save the model to disk for future use.
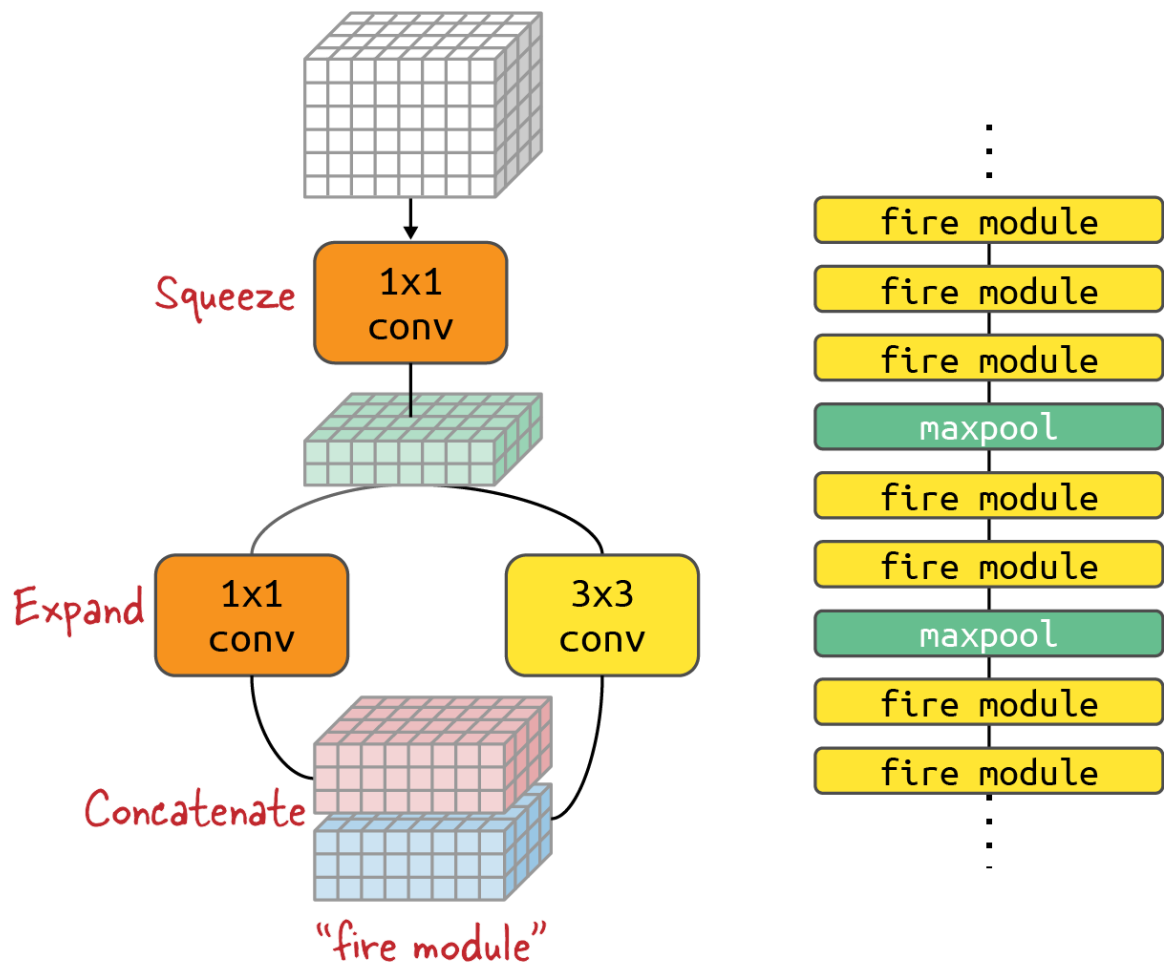

Figure 1. SqueezeNet

Figure 2. Fire Module

** **Submission Notes:** Complete your code and upload the full Notebook to this drive link before next session. The Notebook should contain your name.