NAS

[Network architecture search will help us](javascript:;) [it will search in the copy each](javascript:;) [permutation and combinations of these](javascript:;) [different type of operators and blocks](javascript:;) [and it will find your network which will](javascript:;) [be give you the best result on your task](javascript:;).

[What it will do it](javascript:;) [will do it will propose a configuration](javascript:;) [of a network and these child networks](javascript:;)  
[will trained on our 10 subset of](javascript:;) [data set and then we will do the](javascript:;) [accuracy check on our validation data](javascript:;) [after the whatever the accuracy will](javascript:;) [come will pass as a reward to our](javascript:;)  
[controller so controller will see that](javascript:;) [reward so if their cross is highest then](javascript:;) [the reward is I used so it will change](javascript:;) [our change its policy or change its](javascript:;) [network is in a way so that next time it](javascript:;)  
[will give you a better network](javascript:;) [configuration so that you will get a](javascript:;) [good validation score](javascript:;) .

[Our controller is the RN and network so](javascript:;) [in the input layer it will take the](javascript:;) [input as the hyper parameters so hyper](javascript:;) [parameters here also a like how much](javascript:;) [deep we want our network what time we](javascript:;)  
[want to complete this the training part](javascript:;) [of that and the action it will propose](javascript:;) [the network so it will propose like](javascript:;) [which block they should used how much](javascript:;) [filter size you should use and those](javascript:;)  
[things are passed create a configuration](javascript:;) [of a network then this child network](javascript:;) [will trained on the sample training data](javascript:;) [set and will test on the validation data](javascript:;) [set and whatever the accuracy will come](javascript:;)  
[we will pass that as a reward so this](javascript:;) [reward will taken to the RN network and](javascript:;) [it will update its weights so these](javascript:;) [weights will update it so now in the](javascript:;) [next iterations so in the next time](javascript:;) [stamp the RNA network will propose those](javascript:;) [action which will be giving you a better](javascript:;) [net for configuration.](javascript:;)

[These whole network is consists of](javascript:;) [different cells so each cell are](javascript:;) [consists of like five blocks so these](javascript:;)  
[five block output will concatenate and](javascript:;) [then it will give it to the further](javascript:;) [layers so within each block we have](javascript:;) [different operators so these operators](javascript:;) [are like 3 by 3 5 by 5 depth wise](javascript:;) [convolutions identity convolutions](javascript:;) [different dipole operators are there and](javascript:;) [the input 1 and input 2 is transformed](javascript:;)  
[by these operators so input 1 will be](javascript:;) [the previous layer output and input 2](javascript:;) [will be the previous to previous layer](javascript:;) [output so that those keep connection](javascript:;) [concepts can also be applying it so](javascript:;) [these will combine to give us a block](javascript:;) [output and those block outputs those](javascript:;) [five block outputs will further](javascript:;)  
[concatenate to give us the cell output](javascript:;) [and those cells will](javascript:;) [again concatenate to give us a whole](javascript:;)  
[network so this network architecture](javascript:;) [search will happen then it will give you](javascript:;)  
[a output s but should be the filter huh](javascript:;) [little width what should be the stride](javascript:;) [height stride with how many number of](javascript:;) [filters we should use so this is the](javascript:;) [output given by our controller so this](javascript:;) [output will taken and we will create a](javascript:;) [network according to this output and](javascript:;) [that network wil train and then](javascript:;)  
[validated and whatever the accuracy is](javascript:;) [coming that will give us a reward to the](javascript:;) [controller so now it will change these](javascript:;) [weights so that it will give us a better](javascript:;).

[Internet algorithm are proposed to speed](javascript:;) [up the NASS so these have used some](javascript:;) [different type of techniques like here](javascript:;) [we are in the NES original NS we are](javascript:;) [using the reinforcement learnings one](javascript:;) [more algorithm is there which is P and](javascript:;) [nails which is progressive neural](javascript:;) [architecture search which will do the](javascript:;)  
[prediction of the performance of the](javascript:;) [block cells instead of predicting the](javascript:;) [whole network and it is also not doing](javascript:;) [it's also not using reinforcement](javascript:;)  
[learning](javascript:;) [it is only using dummy models which will](javascript:;) [train to predict these performance of](javascript:;) [block cells much better in in a](javascript:;) [progressive way and there is one more](javascript:;) [variant of Enya's which is ENS which](javascript:;)  
[will do the weight sharing among the](javascript:;) [candidate networks for faster](javascript:;) [performance in every controller epoch a](javascript:;) [child model is proposed then that child](javascript:;) [model it will taking that child model](javascript:;) [and it will do the training on that then](javascript:;) [it will find the vertical with the](javascript:;) [accuracy on the validation data set and](javascript:;) [if you do not find that it having very](javascript:;) [good validation accuracy then we will](javascript:;) [throw that model so here but they are](javascript:;)  
[proposed like instead of throwing that](javascript:;) [model we will use the weights of that](javascript:;) [for the next model so because we had](javascript:;) [done some training on that this will](javascript:;) [give a much better performance](javascript:;) .