

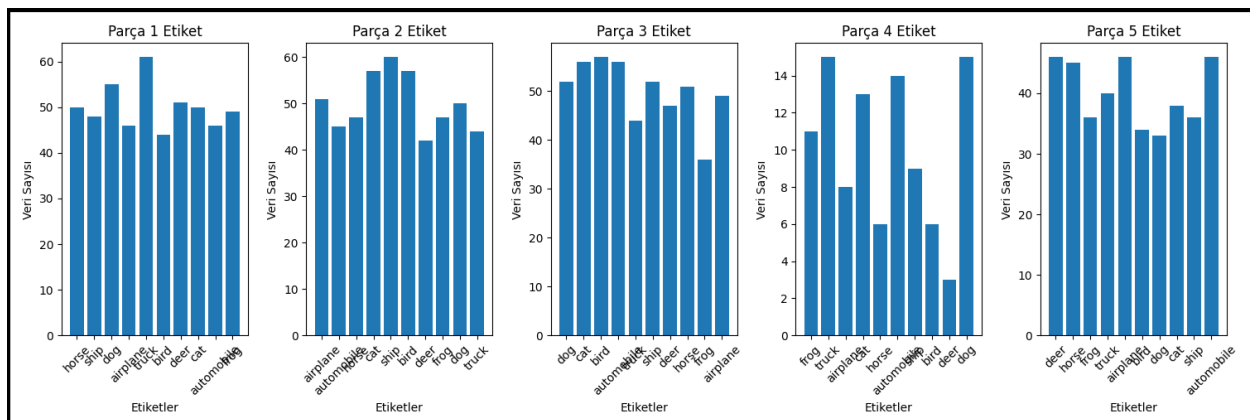
## Model:

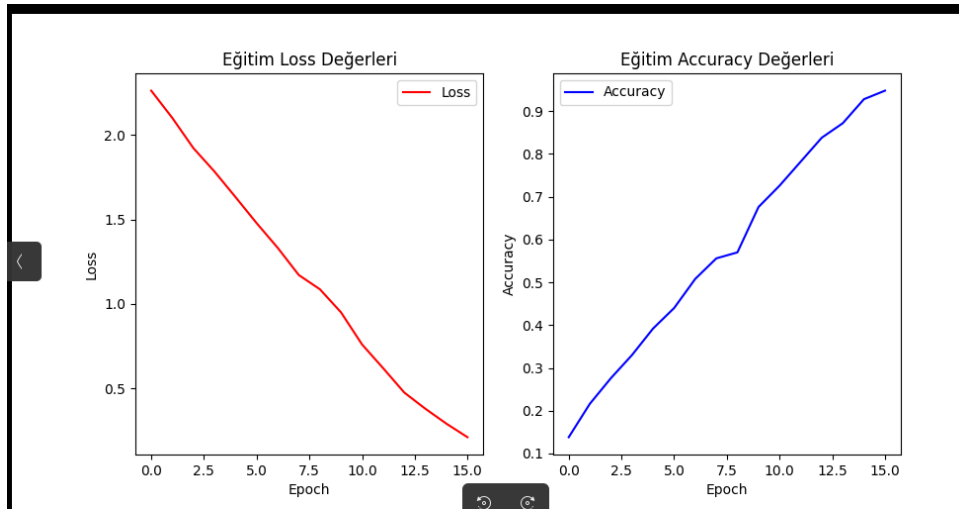
```
class SimpleCNN(nn.Module):
    def __init__(self):
        super(SimpleCNN, self).__init__()
        self.convLayer1 = nn.Conv2d(3, 32, 5)           # First conv
        self.maxPool = nn.MaxPool2d(2, 2)             # Max Pool
        self.convLayer2 = nn.Conv2d(32, 64, 5)         # Second co
        self.drop1 = nn.Dropout(0.2, inplace=False)   # Dropout l
        self.fullyc1 = nn.Linear(1600, 200)           # Fully Con
        self.xav = nn.init.xavier_normal_(self.fullyc1.weight)
        self.fullyc2 = nn.Linear(200, 100)            # Fully Con
        self.fullyc3 = nn.Linear(100, 10)             # Fully Con

    def forward(self, img):
        img = self.maxPool(self.drop1(F.relu(self.convLayer1(img))))
        img = self.maxPool(self.drop1(F.relu(self.convLayer2(img))))
        # img = self.maxPool(F.relu(self.convLayer1(img)))
        # img = self.maxPool(F.relu(self.convLayer2(img)))
        img = img.view(-1, 64 * 5 * 5)
        img = F.relu(self.fullyc1(img))
        img = F.relu(self.fullyc2(img))
        img = self.fullyc3(img)
        return img
```

## Cifar10 Dataset

Total data size : 2000

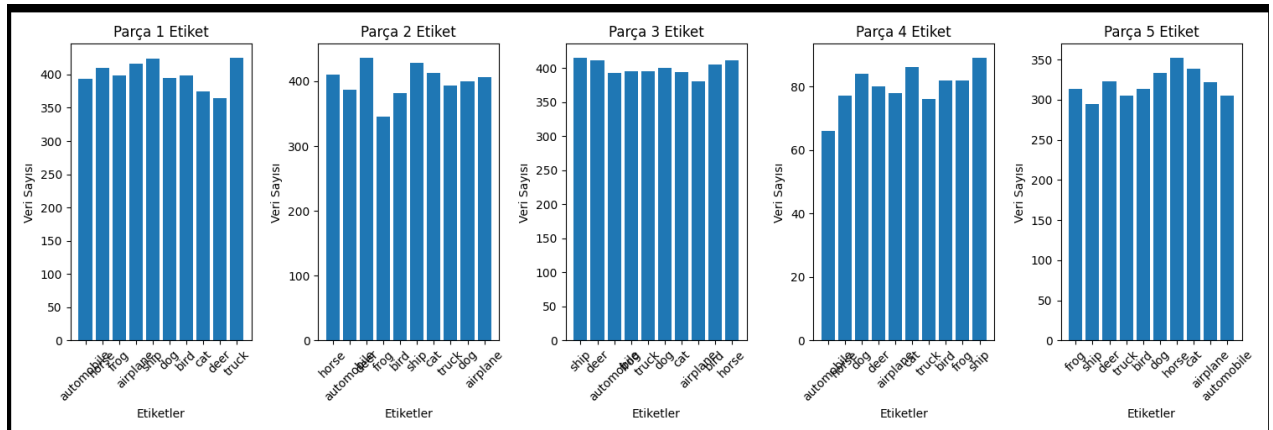


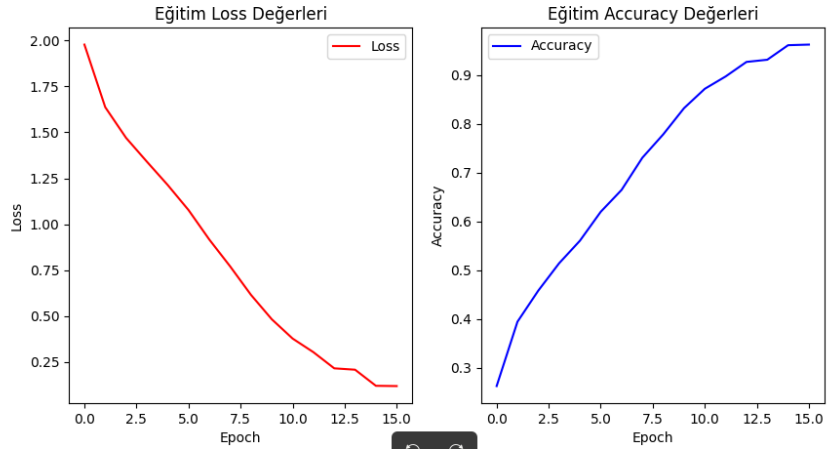


40

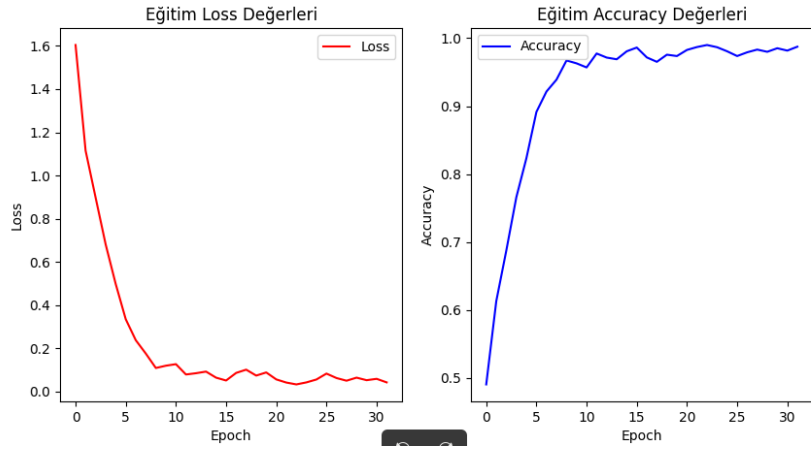
İlk eğitim için training grafiği

	Ortak Veri(Wi)	M1 Eğitim (W1)	M2 Eğitim (W2)	W1 – W2 Line Search	W1 – W2 – Wi Triangle Search	M1 + M2 (wF)
Accuracy(f1)	%40	%41	%42	%42	%47	%40

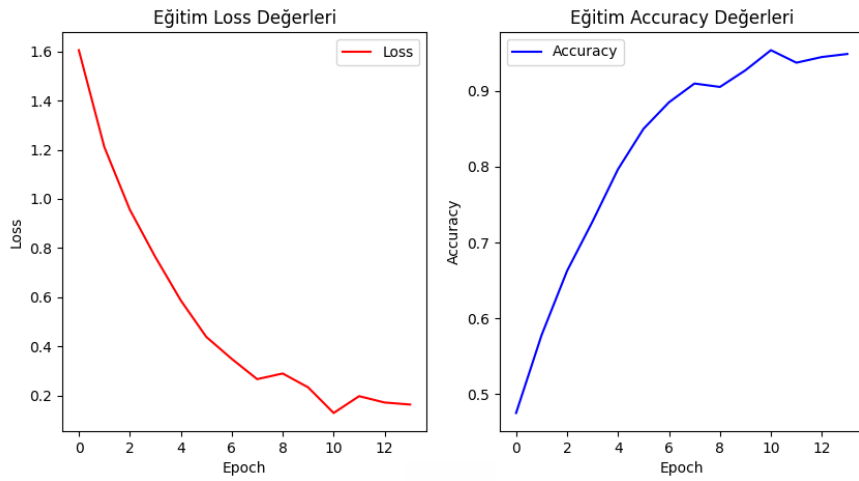
**Total data size : 8000****Seed = 7 için**



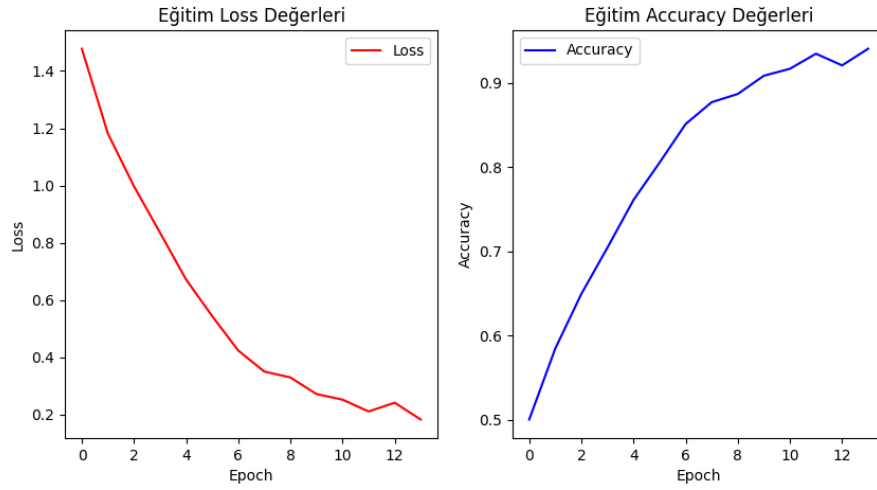
(Ortak Eğitim)



(M1 Eğitim)



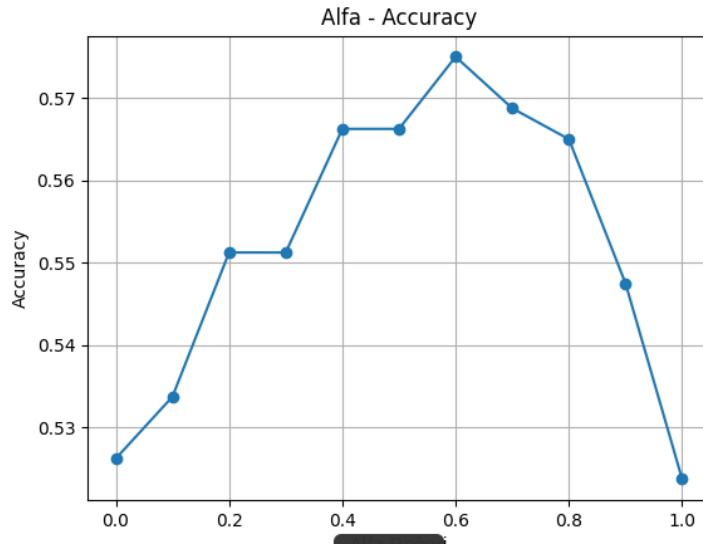
(M2 Eğitim)



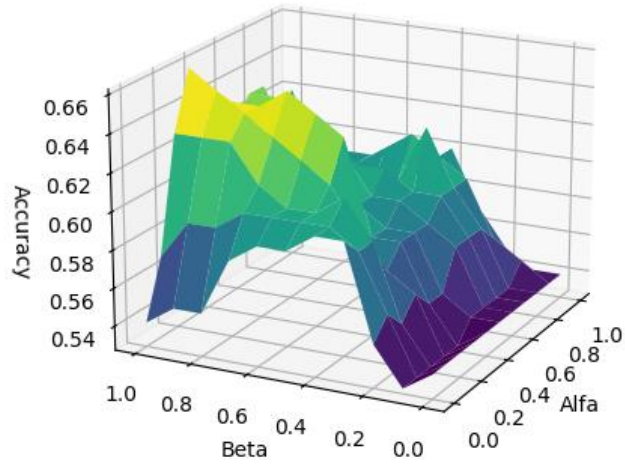
(M1 + M2 Eğitim)

	Ortak Veri(Wi)	M1 Eğitim (W1)	M2 Eğitim (W2)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)	M1 + M2 (wF)
Accuracy(f1)	%51	%52	%53	%57	%61	%55

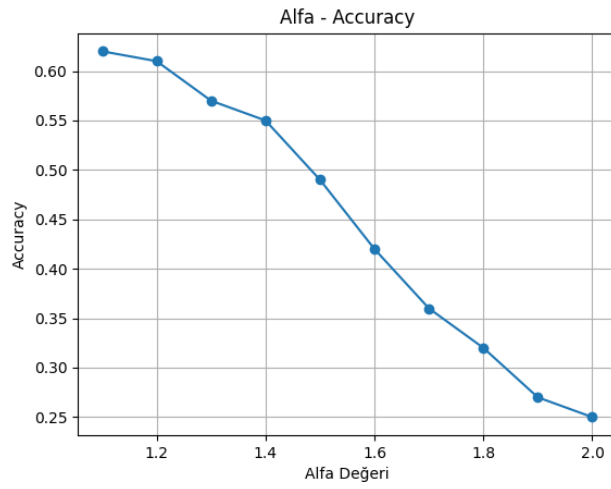
Searching Alfa – Beta Değerleri :



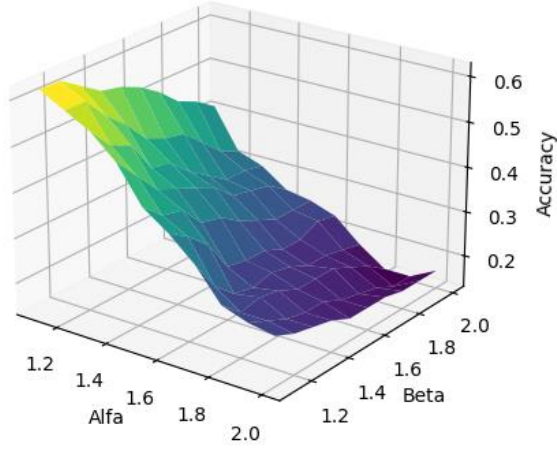
Alfa - Beta - Accuracy Surface Plot



En yüksek accuracy değeri: 0.66 (Alfa = 0.30000000000000004) (Beta = 1.0)



Alfa - Beta - Accuracy Surface Plot

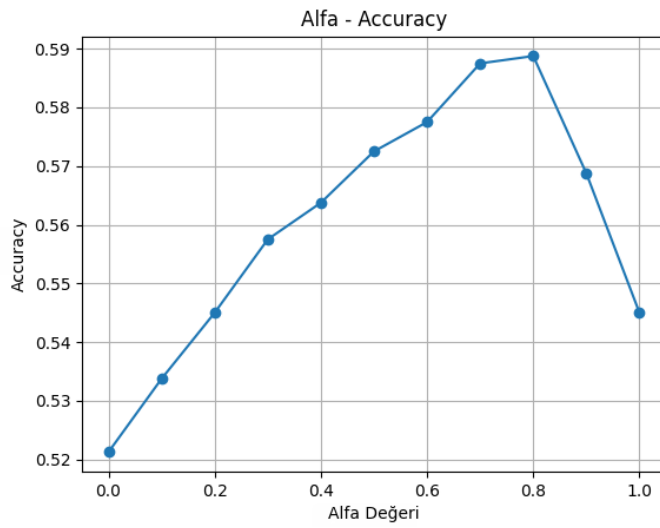


En yüksek accuracy değeri: 0.62 (Alfa = 1.1) (Beta = 1.1)

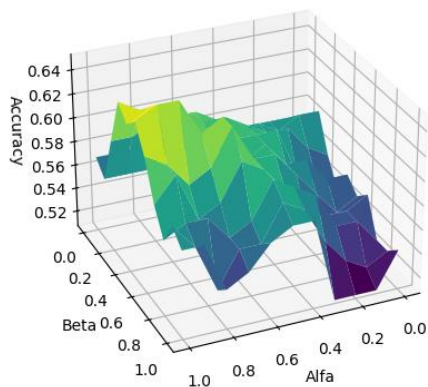
	W1 – W2 Line Search (Extrapolasyon)	W1 – W2 – Wi Search (Extrapolasyon) (wU)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)
Accuracy(f1)	%55	%52	%57	%61

	Ortak Veri(Wi)	M1 Eğitim (W1)	M2 Eğitim (W2)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)	M1 + M2 (wF)
Accuracy(f1)	%51	%52	%53	%57	%58	%54

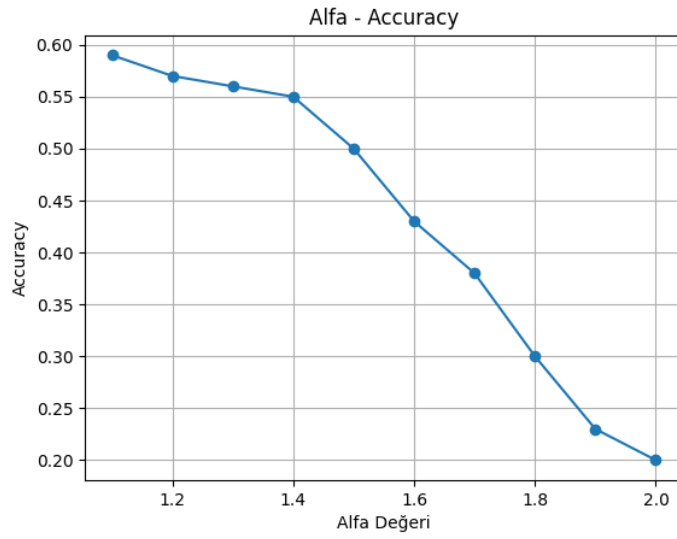
Searching Alfa – Beta Değerleri :



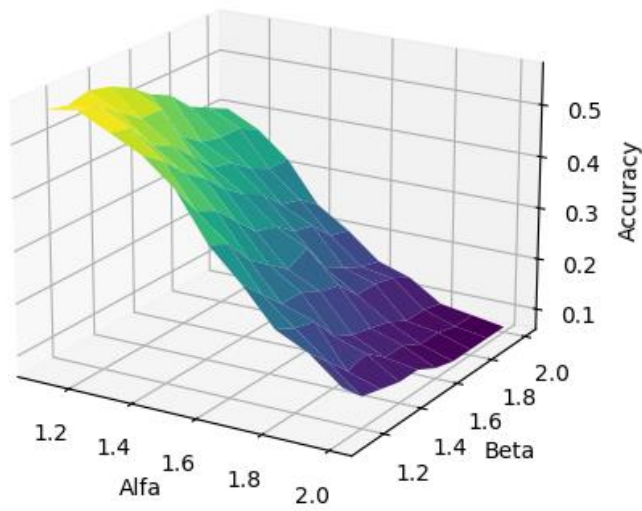
Alfa - Beta - Accuracy Surface Plot



En yüksek accuracy değeri: 0.65 (Alfa = 0.8) (Beta = 0.5)



Alfa - Beta - Accuracy Surface Plot



En yüksek accuracy değeri: 0.62 (Alfa = 1.1) (Beta = 1.1)

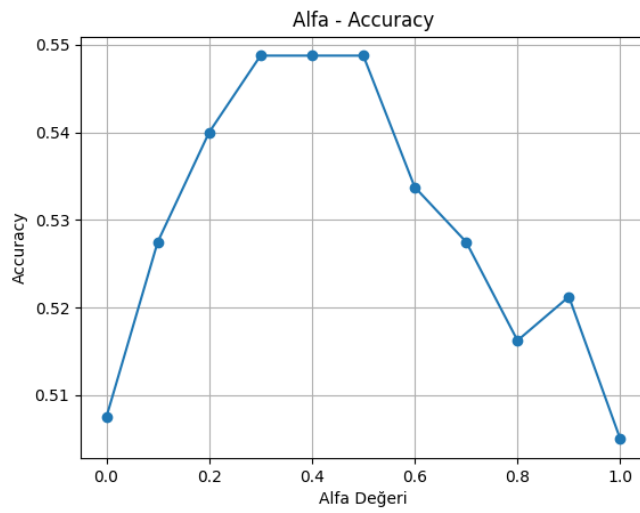
	W1 – W2 Line Search (Extrapolasyon)	W1 – W2 – Wi Search (Extrapolasyon) (wU)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)
Accuracy(f1)	%55	%52	%57	%58



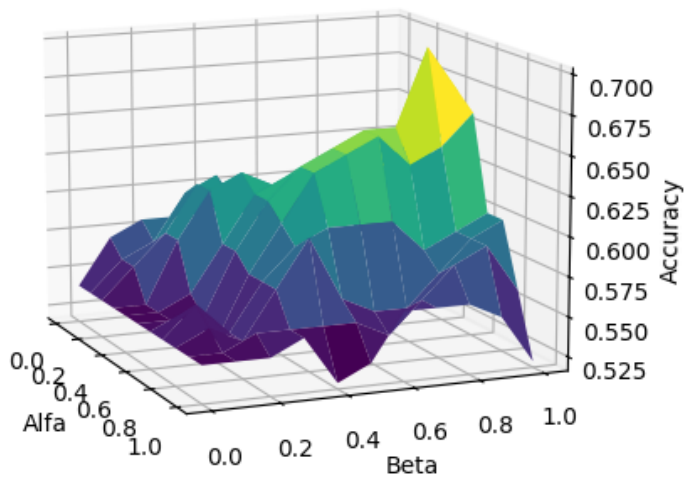
**Seed = 99 için**

	Ortak Veri(Wi)	M1 Eğitim (W1)	M2 Eğitim (W2)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)	M1 + M2 (wF)
Accuracy(f1)	%51	%48	%50	%55	%56	%54

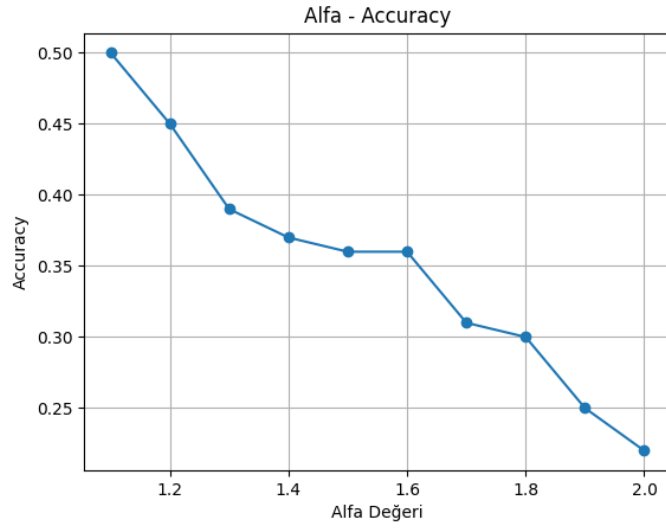
Searching Alfa – Beta Değerleri :



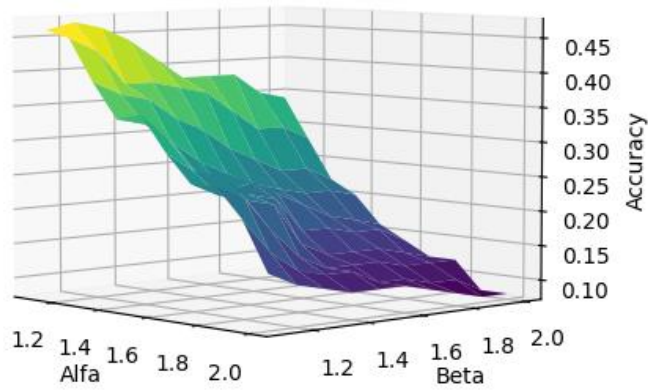
Alfa - Beta - Accuracy Surface Plot



En yüksek accuracy değeri: 0.7 (Alfa = 0.5) (Beta = 0.9)



Alfa - Beta - Accuracy Surface Plot



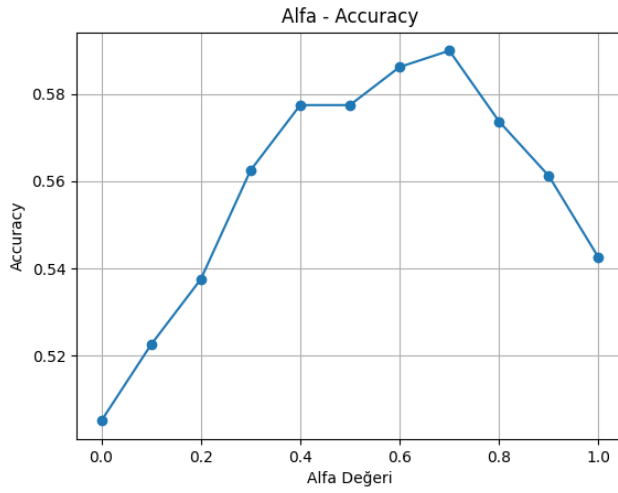
En yüksek accuracy değeri: 0.47 (Alfa = 1.1) (Beta = 1.2000000000000002)

	W1 – W2 Line Search (Extrapolasyon)	W1 – W2 – Wi Search (Extrapolasyon) (wU)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)
Accuracy(f1)	%51	%47	%55	%56

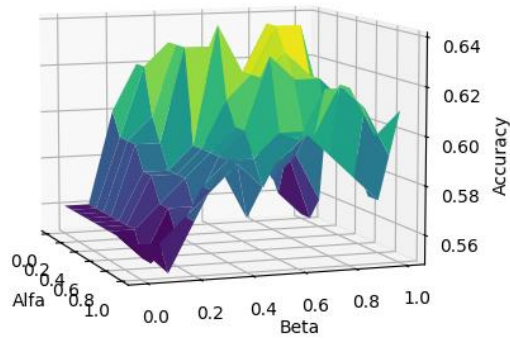
**Seed = 404 için**

	Ortak Veri(Wi)	M1 Eğitim (W1)	M2 Eğitim (W2)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)	M1 + M2 (wF)
Accuracy(f1)	%52	%54	%50	%57	%57	%54

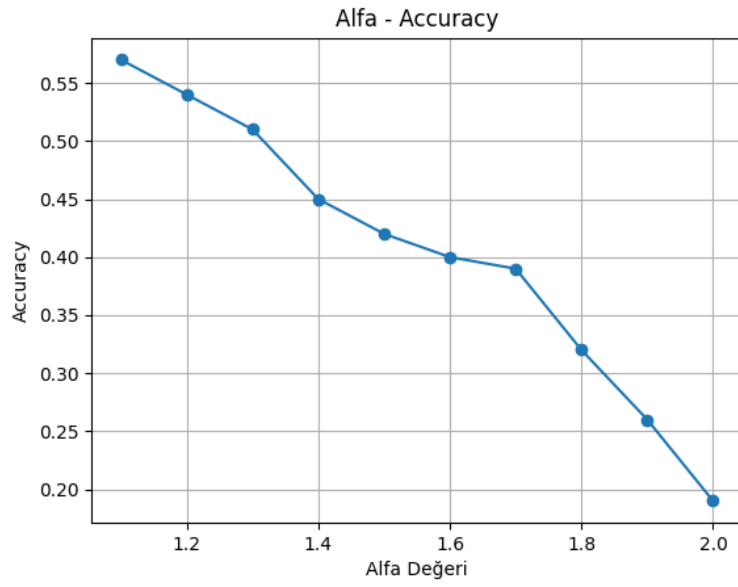
Searching Alfa – Beta Değerleri :



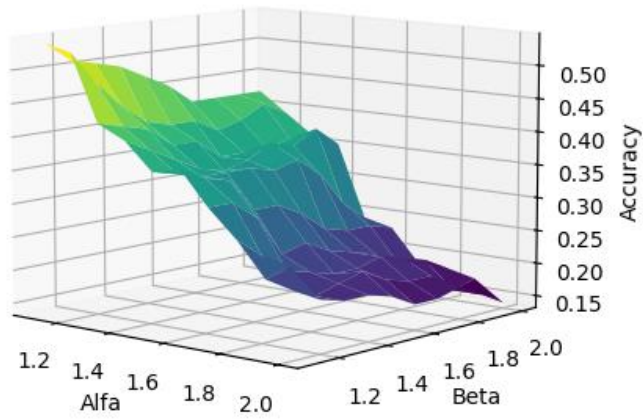
Alfa - Beta - Accuracy Surface Plot



En yüksek accuracy değeri: 0.64 (Alfa = 0.4) (Beta = 0.5)



Alfa - Beta - Accuracy Surface Plot



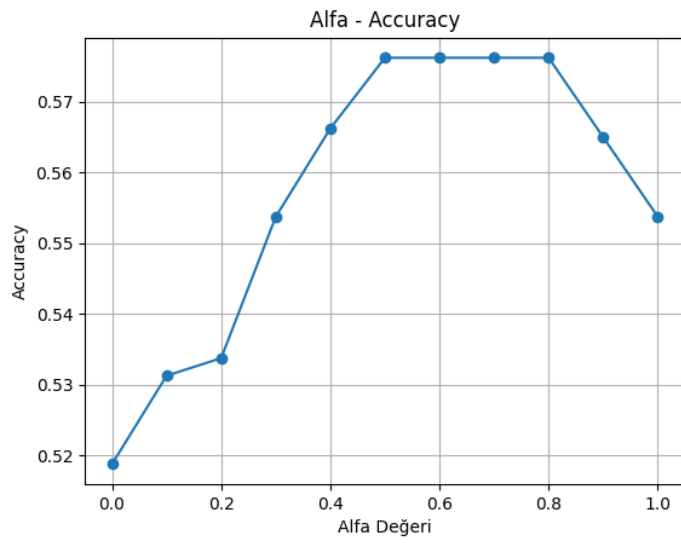
En yüksek accuracy değeri: 0.54 (Alfa = 1.1) (Beta = 1.1)

	W1 – W2 Line Search (Extrapolasyon)	W1 – W2 – Wi Search (Extrapolasyon) (wU)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)
Accuracy(f1)	%53	%52	%57	%57

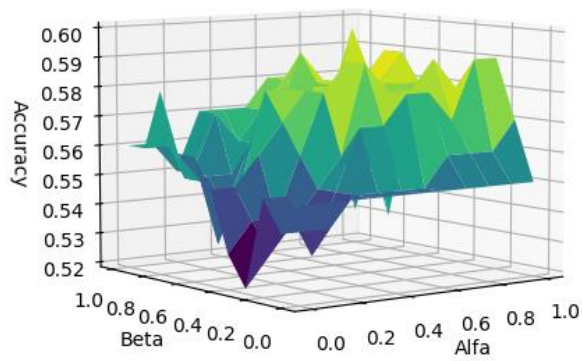
**Seed = 704 için**

	Ortak Veri(Wi)	M1 Eğitim (W1)	M2 Eğitim (W2)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)	M1 + M2 (wF)
Accuracy(f1)	%51	%52	%50	%55	%57	%55

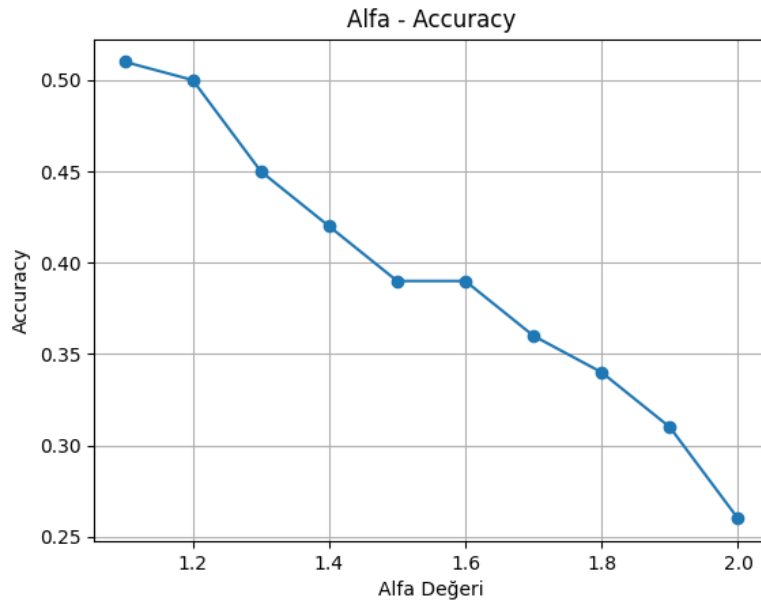
Searching Alfa – Beta Değerleri :



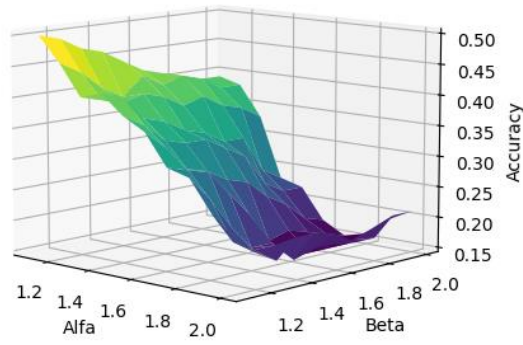
Alfa - Beta - Accuracy Surface Plot



En yüksek accuracy değeri: 0.6 (Alfa = 0.6000000000000001) (Beta = 0.5)



Alfa - Beta - Accuracy Surface Plot



En yüksek accuracy değeri: 0.5 (Alfa = 1.1) (Beta = 1.1)

	W1 – W2 Line Search (Extrapolasyon)	W1 – W2 – Wi Search (Extrapolasyon) (wU)	W1 – W2 Line Search (wL)	W1 – W2 – Wi Search (wU)
Accuracy(f1)	%56	%55	%55	%57