

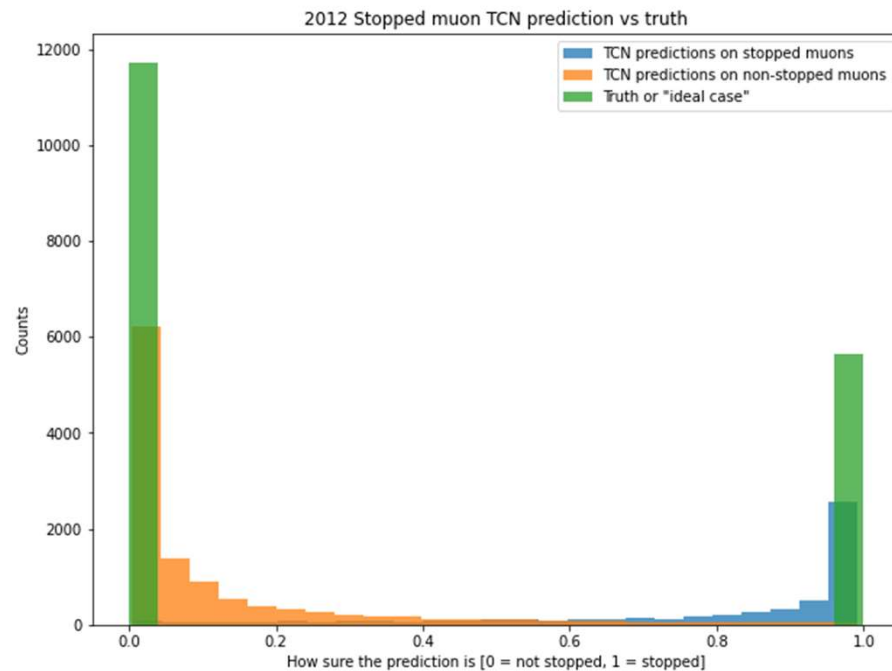
RIDE Update – 16/04/2021

Sofus Stray

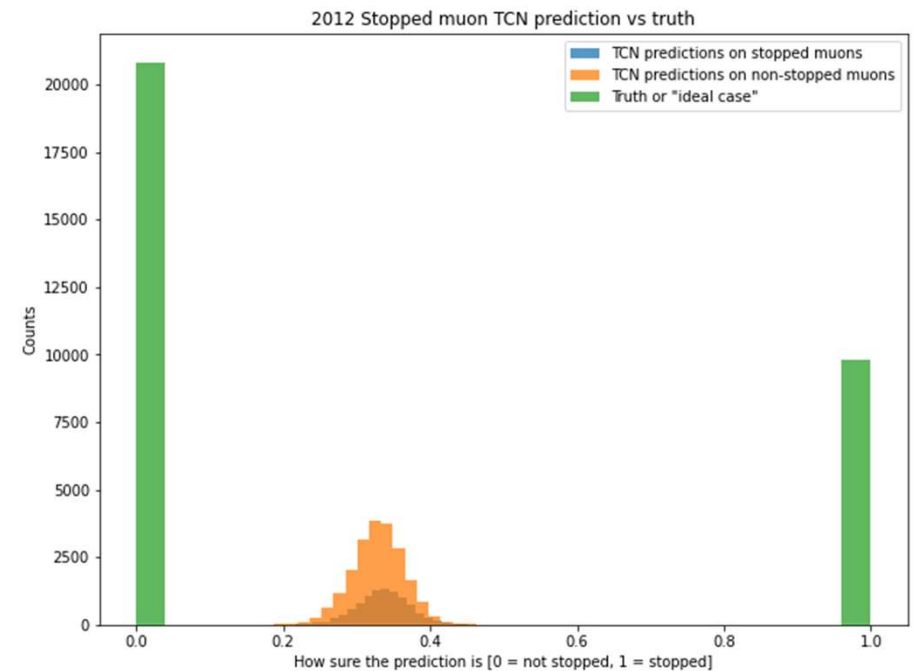
Weekly NBI Meeting

Last time on Sofus' TCN Adventures

2012 😊

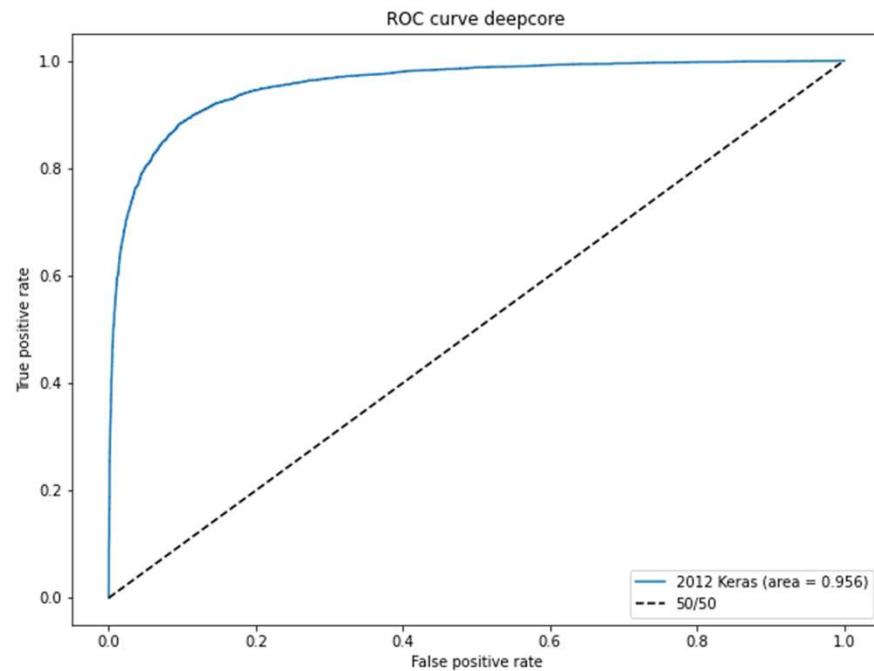


2016 😞

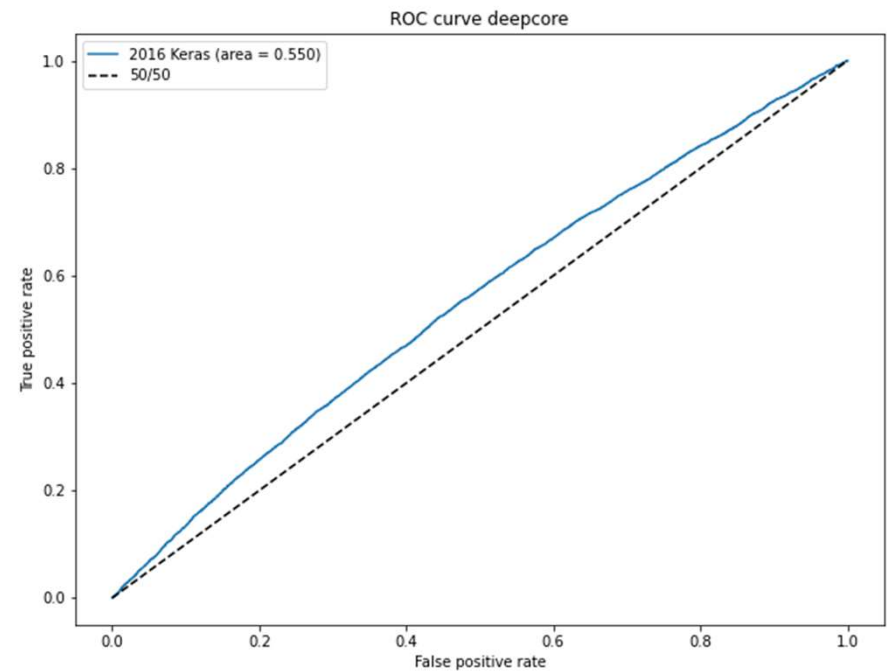


Last time on Sofus' TCN Adventures

2012 😊



2016 😞



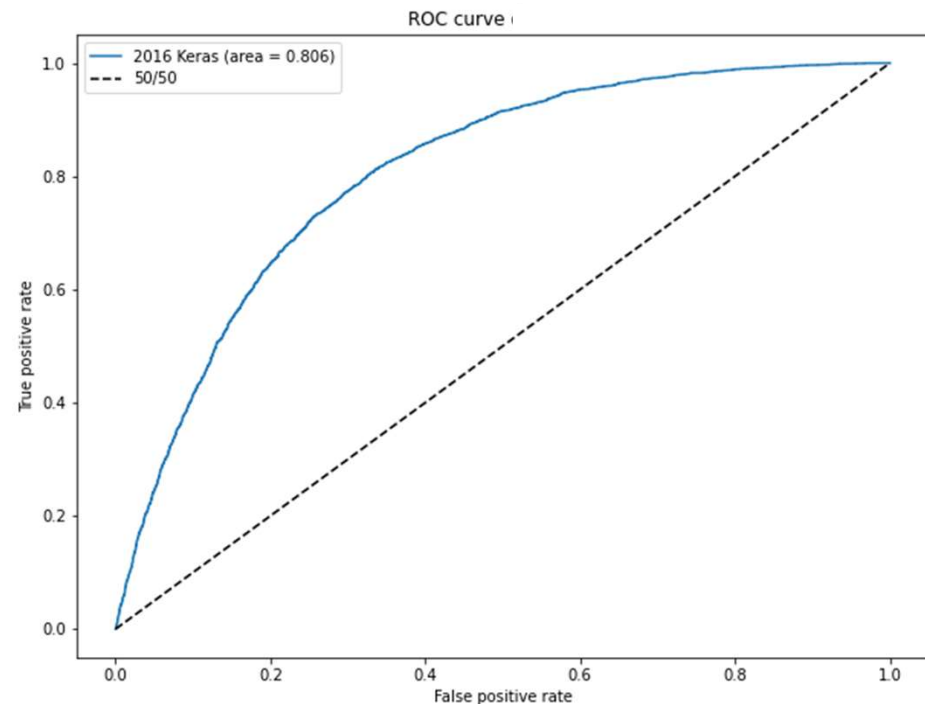
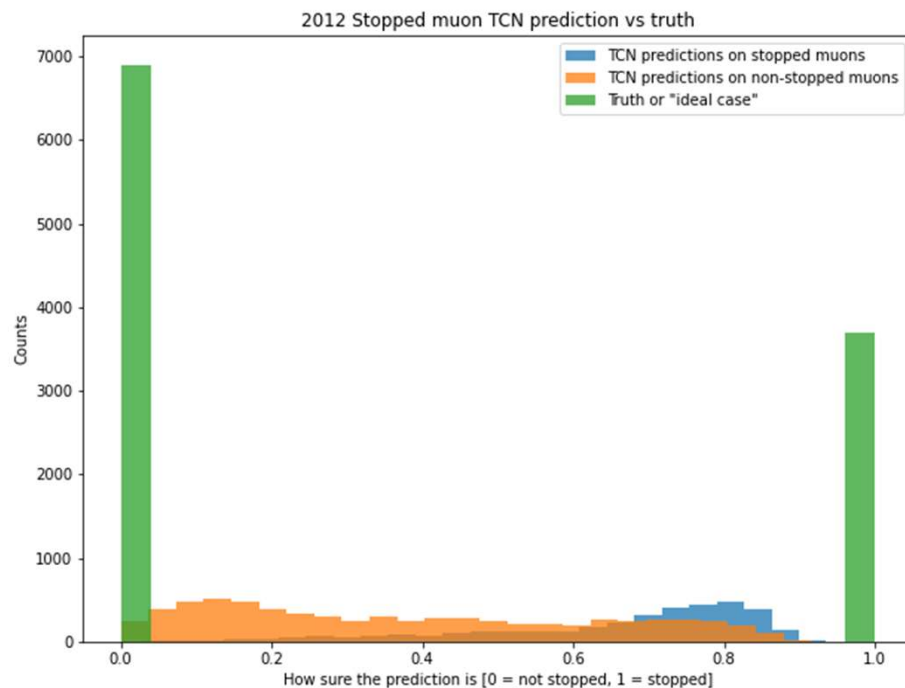
This time

- Multiple primary particles per event
- Overinflated DOM response
- Solution: Remove >1 primaries events

```
[[ I3Particle MajorID : 14365563888495219497
  MinorID : 10665
  Zenith : 0.557234
  Azimuth : 2.11546
    X : -35495.9
    Y : 59428.9
    Z : 111554
  Time : -427992
  Energy : 1677.77
  Speed : 0.299792
  Length : 110630
  Type : PPlus
  PDG encoding : 2212
  Shape : Primary
  Status : NotSet
  Location : Anywhere
]]
```

```
[[ I3Particle MajorID : 14696551917053669575
  MinorID : 683
  Zenith : 0.754271
  Azimuth : 5.77742
    X : 91185
    Y : -50194.8
    Z : 111103
  Time : -497164
  Energy : 62701.3
  Speed : 0.299792
  Length : 111913
  Type : He4Nucleus
  PDG encoding : 1000020040
  Shape : Primary
  Status : NotSet
  Location : Anywhere
], [ I3Particle MajorID : 14365563888495219497
  MinorID : 856
  Zenith : 0.721246
  Azimuth : 4.51845
    X : -18492.9
    Y : -96057
    Z : 111202
  Time : -472539
  Energy : 6442.51
  Speed : 0.299792
  Length : 121928
  Type : PPlus
  PDG encoding : 2212
  Shape : Primary
  Status : NotSet
  Location : Anywhere
]]
```

TCN with >1 primaries removed



- Not perfect but massive improvements
- TCN makes use of nearly entire classification space
 - Still converges very early