It was a real joy to take part in the 3-week Neuromatch academy (NMA) Deep Learning course this year.

The NMA is an international community of neuroscientists (from academia and from industry) coming together to deliver summer schools and other events

Learning more about and practicing with deep learning codes was something I wanted to do for a while now. In the course we covered lots of architectures from single-layer NNs to transformers and studied concepts like generalization, transfer learning and overfitting.

In the afternoons I teamed up with some wonderful people from all over the world and carried out a Natural Language Processing project. We used both a pre-trained DistilBERT as well as a home-made RNN model to carry out emotion classification in a database of tweets we found online. The objective was to compare performances and to find if customizing things like preprocessing, NN architecture and other parameters could give our RNN a competitive edge over Google’s huge transformer network(- it didn’t in this case!).Some pics below show our results!

The process was truly exciting, with the most interesting part being all the amazing scientist I got to meet and hang out with along the way!!