**ELLIS talk**

# Neural Machine Translation Inside Out

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In the last decade, machine translation shifted from traditional statistical approaches (SMT) to end-to-end neural ones (NMT). While traditional approaches split the translation task into several components and use various hand-crafted features, NMT learns the translation task directly from data, without splitting it into subtasks. The main question of this talk is how NMT manages to do this, and I will try to answer it keeping in mind the traditional paradigm. First, I will show that NMT components can take roles corresponding to the features modelled explicitly in SMT. Then I will explain how NMT balances the two different types of context, the source and the prefix of the target sentence. Finally, we will see that NMT training consists of the stages where it focuses on the competences mirroring three core SMT components: target-side language modeling, lexical translation, and reordering.

## Wednesday, November 10, 2021 04:00pm - 06:00pm
Zoom Link:
https://istaustria.zoom.us/j/94284847467?pwd=VXlZZjhtTEpZbUpGRHBId3liM1k0UT09  Meeting ID: 942 8484 7467 Passcode: 719116

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