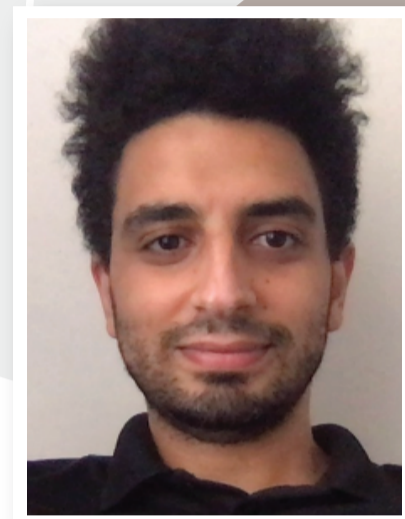# "ML as a Tool" vs. "ML as a Model" for the Study of Child Development in the Wild

## Prof. Abdellah FOURTASSI
### Aix-Marseille University

**Date:** November 29, 2022 (Tuesday)
**Time:** 4:30pm - 6:15pm (Hong Kong Time, UTC +8)

**\*Seminar will be conducted via ZOOM**

**Prior registration is required**
The Zoom Meeting details will be provided on November 28, 2022

## Abstract

Recent improvements in Machine Learning (ML) promise to transform research in developmental psychology by allowing the quantitative study of children's behavior outside the lab. ML can help achieve this goal in two steps: 1) automatic annotation of a target behavior from naturalistic data, and 2) quantitative prediction of this behavior from complex (possibly causal) factors. These two steps are obviously related but they diverge in the nature of the ML they call upon. In the first, ML is a "tool" whose purpose is to overcome the limitations of manual labor. In the second, ML is considered a "model" whose purpose is to mimic the child's behavior given a similarly rich input/stimuli. In this brief talk, I will illustrate – based on ongoing research in our team about children's early conversational development – how "ML as a tool" and "ML as a model" can be articulated to help build quantitative theories of child development in the wild.

## Speaker

Assistant Professor of Computer Science at Aix-Marseille University and Research Fellow at the Institute of Language, Communication, and the Brain. Co-founder and head of the Computational Communicative Developmental research team (CoCoDev) that focuses on using Machine Learning as a scientific tool to study children's communicative and cognitive development outside the lab.

## All are Welcome