NTNU
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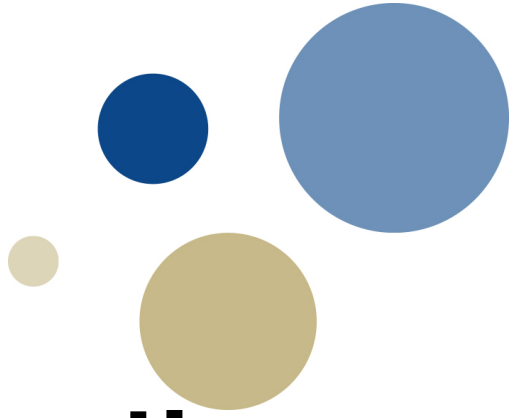

# Human Computer Interaction

## Introduction

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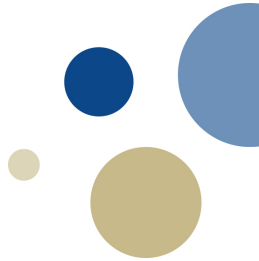
# Course Design Criteria

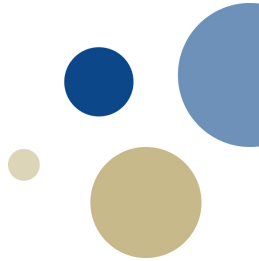


- Facilitate a lively discussion about the discipline of HCI with particular focus on NIMEs.
- Explore individually and in group the fundamental concepts behind HCI applied to the work produced during the physical computing workshop.
- Promote the language used in research (e.g. oral presentations and paper writing).
- Contextualize the seminar lectures to the broader context of HCI and interactive systems for music performance at a theoretical level (e.g. readings).

# What are the Lectures About?

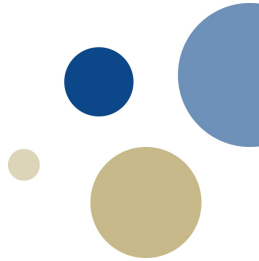
- A 4-lecture series about the theory and practice in the field of human-computer interaction applied to music technology.
- First two sessions: Broader perspective of HCI (trends and research methods).
- Last two sessions: Focus on the NIME community (practices, instrument design).
- Readings are expected before coming to class and the class will be used to discuss the topics in a paced manner.
- These discussions should be helpful for the final assignment: write a short paper about the system that you have developed in the physical computing workshop.

# Outline



— 1st day: Trends in HCI.
— 2nd day: Evaluation in HCI.
— 3rd day: NIMEs (focusing on practice).
— 4th day: NIMEs (focusing on instrument design).

# General Learning Outcomes

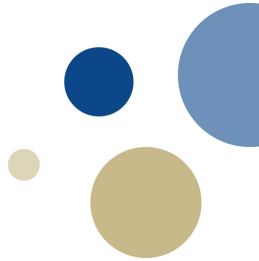


- Develop critical thinking skills applied to HCI and NIME research.
- Explore how to do research and write about a self-built prototype of an interactive system for music performance.
- Discover new trends in the HCI and NIME disciplines.
- Discuss a diversity range of practices in the HCI and NIME disciplines.

# Grading

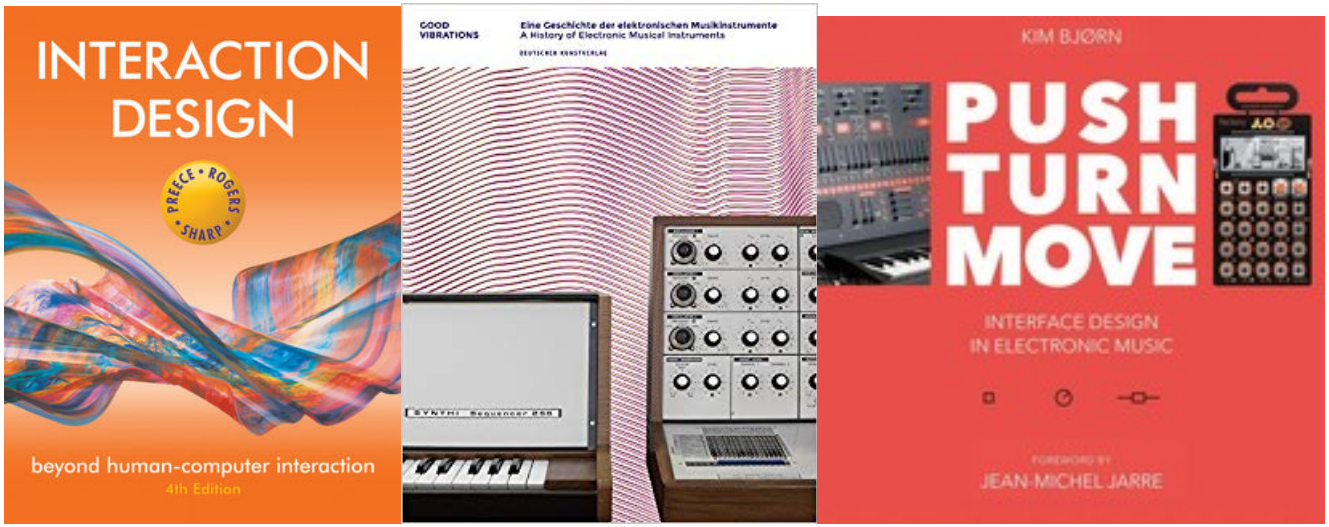
- 40% Individual work vs 40% Group work
  *You need to send individual and group summaries (before and after class respectively) of the suggested readings and participate in the discussions in class to get a positive grade. The final assignment will be writing a paper with individual and group parts.*
- 40% Daily work vs 40% Final assignment work
  *You will be expected to participate both in the daily assignments and in the final assignment to have a positive grade.*
- 20% Participatory assistance
  *An overall participatory attitude and regular assistance can improve the grade.*

# Previous Knowledge / Preparation



— Every day you should check the suggested reading(s) that will be discussed at the beginning of the class.

# Recommended General Readings




— The book *Interaction Design: Beyond Human-Computer Interaction* by Jenny Preece, Yvonne Rogers and Helen Sharp [1].
— The book *Good Vibrations: Eine Geschichte der elektronischen Musikinstrumente / A History of Electronic Musical Instruments [2]*
— The book *Push Turn Move* by Kim Bjørn [3]

# References


[1] Jenny Preece, Yvonne Rogers, and Helen Sharp. *Interaction Design: Bbeyond Human-Computer Interaction*. John Wiley & Sons, 2015.

[2] Benedikt Brilmayer, Sarah-Indriyati Hardjowirogo, and Conny Restle. *Good Vibrations: Eine Geschichte der elektronischen Musikinstrumente / A History of Electronic Musical Instruments*. Deutscher Kunstverlag, 2018.

[3] Kim Bjørn. *Push Turn Move*. Bjooks, 2017.