



Norwegian University of
Science and Technology



Human Computer Interaction

NIMEs (focus on instrument design)

Anna Xambó

Department of Music, NTNU

1 November 2018

Learning Outcomes



- Understand the role of a *digital lutherie* or a designer of NIMEs.
- Explore the key elements of NIME instrument design from an HCI perspective (design & evaluation).
- Discern different categories of NIMEs from an HCI design perspective.
- Be able to create diagrams of self-built NIMEs by reversed engineering methods (learning from existing diagrams).

Class Structure



- 10.15-10.40 Speedy presentations of the short bios.
- 10.40-11.00 Presentation/lecture about instrument design in NIME from an HCI perspective (design & evaluation) + Q&A.
- 11.00-11.30 Team work: Classification and representation of NIMEs.
- 11.30-11.50 The teams summarize to the group the results of the team work activity (10 min per group).
- 11.50-12.00 Wrap up & Closing

Preparation: Short Bio



- Write a short bio (125 words +/- 10 words) of your hero in music technology. More info can be found on the assignment's page Day 4 Individual Assignment (<https://uio.instructure.com/courses/11472/assignments/13452>). Once we discuss all the bios in class, we could publish them as one blog post on the MCT blog!

Speedy Presentations: Short Bios



Presentation/lecture: NIME (instrument design)



- Presentation/lecture of a selection of concepts in NIME's instrument design from an HCI perspective + Q&A.

Team work: Classification and representation of NIMES



- Selection of a paper from the NIME Reader (<https://www.springer.com/gp/book/9783319472133>) where a NIME is presented. PDFs can be found in NIME Proceedings (<http://www.nime.org/archives/>). Discussion about ...
 - what is the type of instrument design presented?
 - how is the instrument design presented in the paper: diagrams? photographs? block diagrams? mindmaps?

Team work: Summaries



- The teams summarize to the group their selected paper / NIME (10 min per group).
 - what is the type of instrument design presented?
 - how is the instrument design presented in the paper: diagrams? photographs? block diagrams? mindmaps?

Wrap up & Closing



- From today's examples... how will you represent differently your self-built prototype?
- Anonymized reviews from the jury members.
- Drop-in hours under request during the week 5-9 November, 2018.
- Next WoNoMute's talk: Monday 26 November 2018 14.00–15.00!
- Next Spring: Audio Programming with Web Audio (elective)

Resources



- The content of this class can be found on Canvas here:
<https://uio.instructure.com/courses/11472/pages/human-computer-interaction-2b>
- The slides of this class can be found on GitHub here:
<https://github.com/axambo/hci-lecture-slides/tree/master/slides/d4/>
- Archive of NIME Proceedings:
<http://www.nime.org/archives/>