## Synth Challenge 2020 entry

## Jakub Hlusička

## **Used Techniques**

- convolutional reverb via an impulse response;
- formant synthesis (used for most instruments);
- wavetable synthesis for the piano;
- exponential ADSR envelope for the piano;
- different panning offsets for different channels;
- quantization for one of the instruments used for arbitrary synthesis

## Sources:

- Audio synthesis course at CTU, lead by Prof. Ing. Roman Čmejla, CSc.
- Reverb impulse responses: https://www.voxengo.com/impulses/
  - Musikvereinsaal for dvorak.mid
  - Small Drum Room for Intensive Care Unit
- MIDI for arbitrary synthesis: Intensive Care Unit, originally composed by Emma Essex, translated to MIDI by TheVocoderGuy.
- $\bullet$  Wavetable piano sample Ensoniq<br/> ESQ-1 Piano C3 from: https://freewavesamples.com/ensoniqesq-1-piano-c3