Sparse Matrix-Vector + abs, Johannes Schoder Friedrich Schiller University Jena, Germany

- Summary of what you did
  - Plan
    - write “own” HLS Kernel
    - SW- / HW- Emulation / HW-Run
  - Final project – HLS Kernel attempt, HW emulation with dummy functions

- Vitis Tools are HUGE, Vitis_HLS is cool
- Far easier to run on local Alveo U50 than on AWS F1
- OpenCL experience would’ve been nice
- Getting things to run on AWS takes a lot of steps
- There are a LOT of optimization possibilities for own HLS Kernels, it’s hard to know what impact each will have
  - Results: “just” HW Emulation :/

- vector x and c, sparse matrix L


```
Device[0]: program successful!
Running Vector add with 262144 elements
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