### Continuous Assessment (CA) and Research Project (RP)

#### **Important information:**

 Project end time and date: All results must be submitted by 11:59pm, FRIDAY, 1-OCT-2021 (Week 7)

11:59pm, FRIDAY, 5-NOV-2021 (Week 12)

to LumiNUS

(folder: **Segment B-submission-CA/RP**).

- Submission: Report, codes, demo video in one zip file with name: your NUS ID.zip, e.g., A0123456X.zip.
- Please always remain contactable during the semester.
- Format of the report: Use IEEE Templates for Conference Proceedings.
   No more than 5 pages for CA, no more than 6 pages for RP allowed.
   The template (word/tex) have been uploaded to LumiNUS.

You may also download it from <a href="https://www.ieee.org/conferences/publishing/templates.html">https://www.ieee.org/conferences/publishing/templates.html</a>

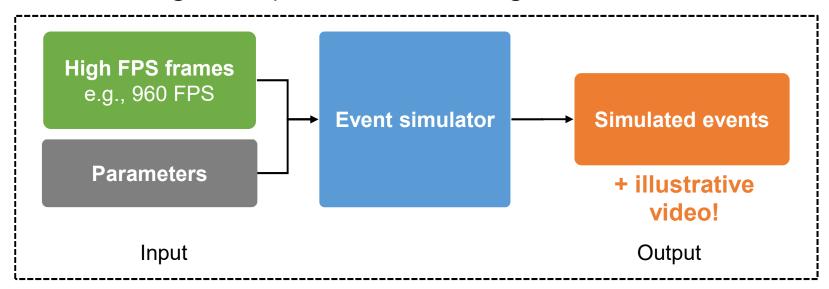
# Continuous Assessment (CA) and Research Project (RP)

#### **Important information:**

- Written report should contains at least the following:
  - 1. An abstract that briefly summarizes what you have done and what the results are,
  - 2. a brief introduction to the project and the problem that you are solving,
  - 3. derivation of the model ("problem formulation"),
  - 4. description of the framework and algorithm(s) used
  - 5. the results,
  - 6. conclusions and/or a summary,
  - 7. references (if applicable).

# CA: Design an Event Data Simulator

 Aim: To design a simulation framework to generate events, given high frame-rate images as inputs. A reference diagram is shown below:

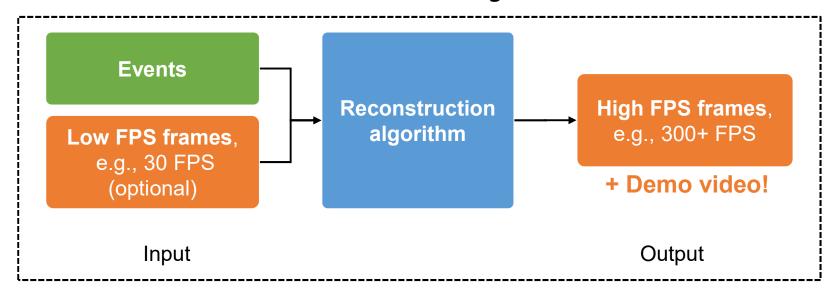


 The principle of event camera and event data simulation will be discussed later in the first lecture.

1610.08336.pdf (arxiv.org)
(4) The Event-Camera Dataset and Simulator - YouTube

# RP: Event-based High Frame-Rate Video Reconstruction

 Aim: To design and implement an event-based high FPS video reconstruction framework. A reference diagram is shown below:



- Information hub for event-based vision:
   <u>uzh-rpg/event-based\_vision\_resources (github.com)</u>
- More information/Q&A session in the 2<sup>nd</sup> lecture, after introduction of all required backgrounds/knowledges.