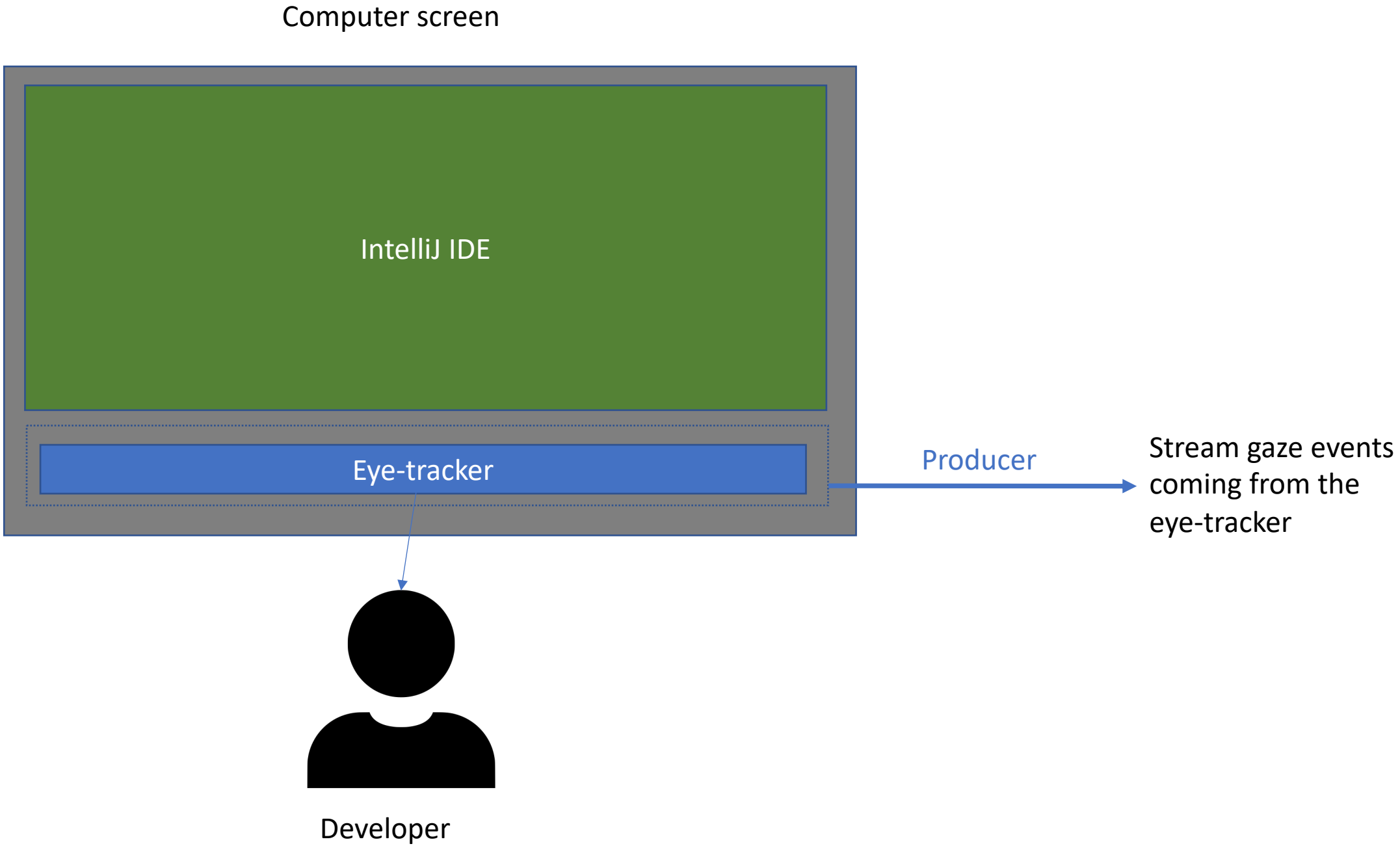
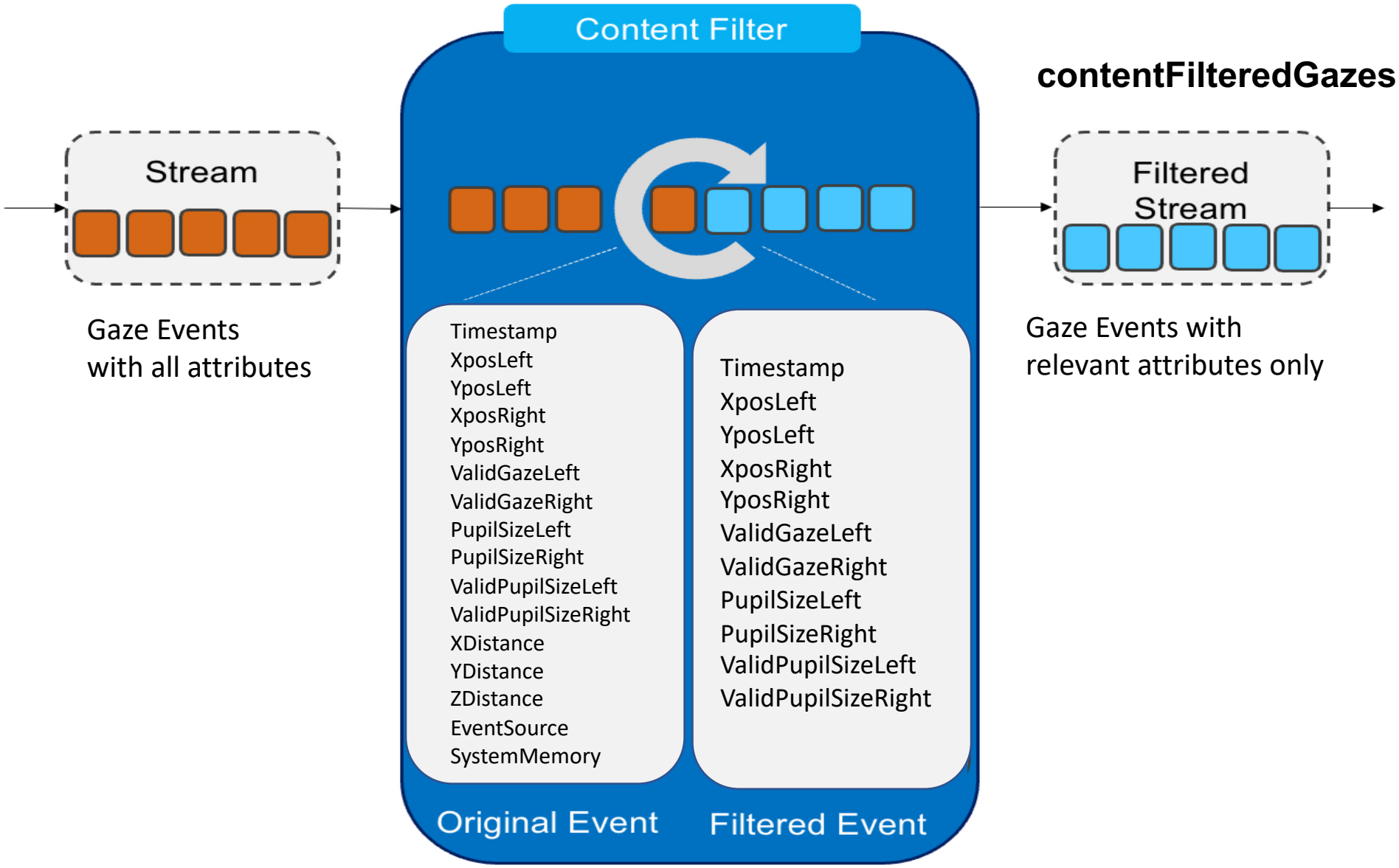
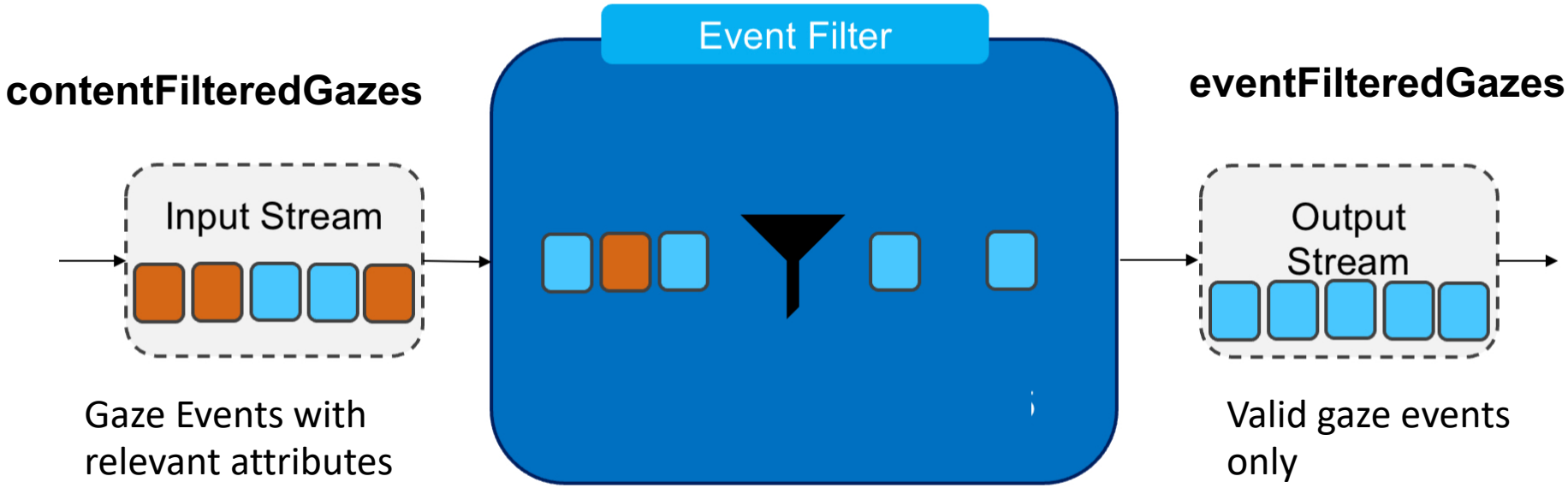
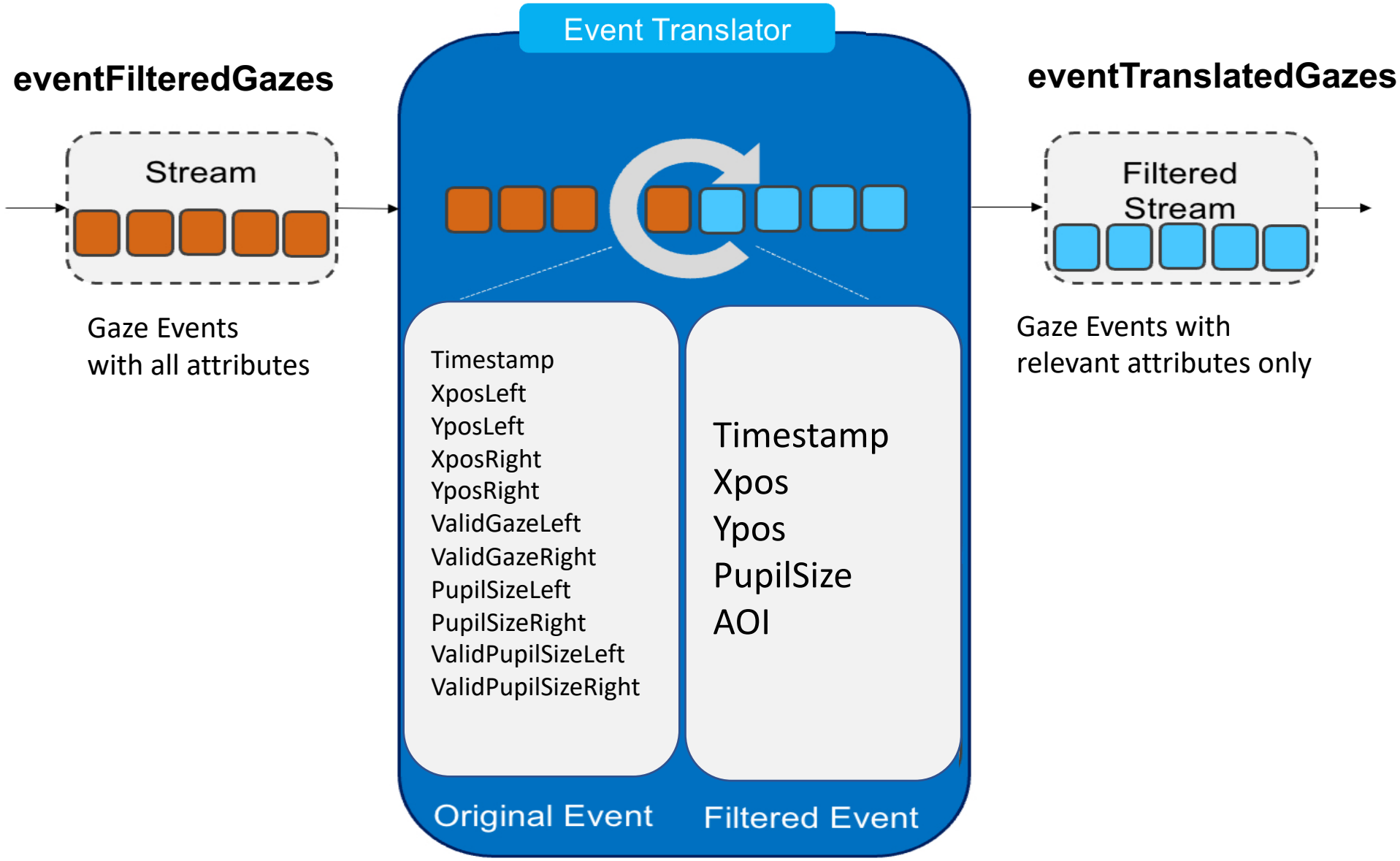
Lab12 Part 2

Dr. Amine Abbad-Andaloussi

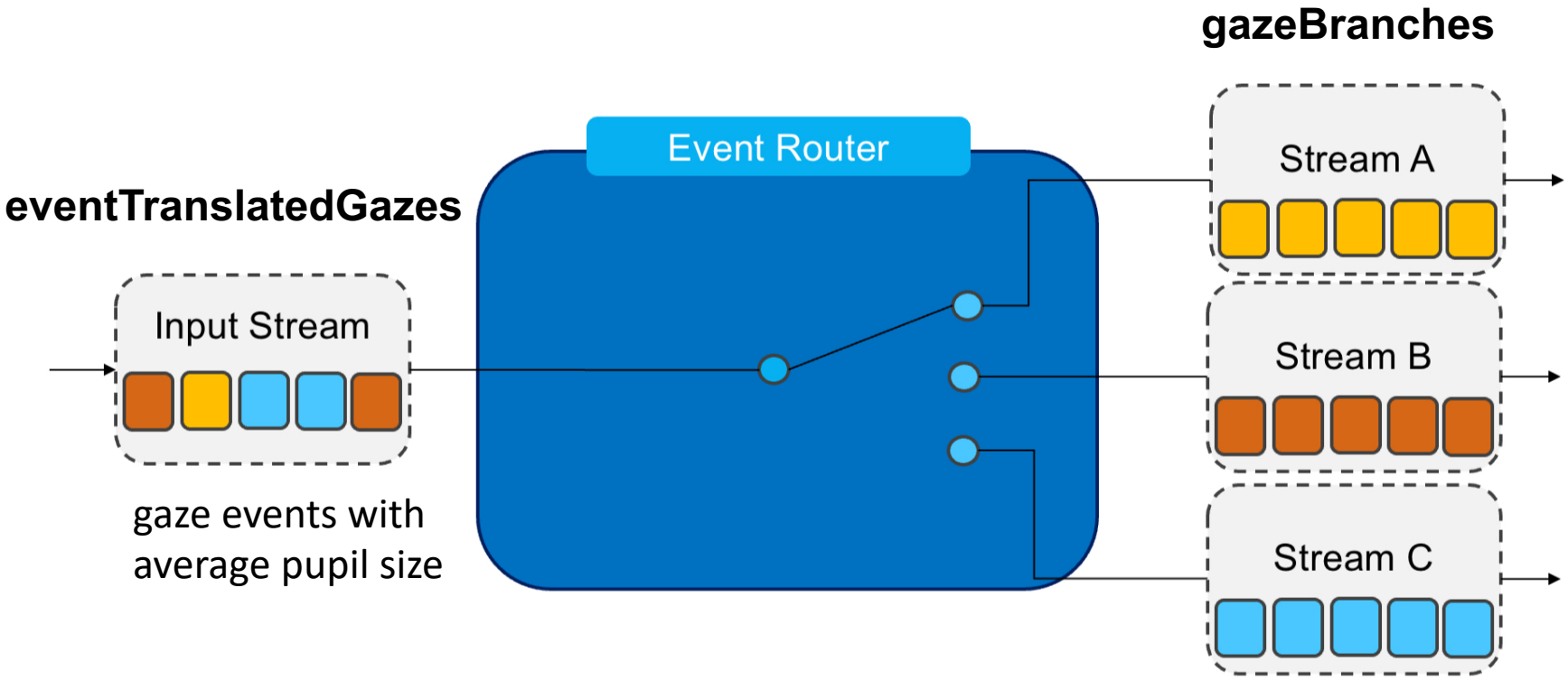

Computer screen
IntelliJ IDE
Eye-tracker
Producer
Stream gaze events coming from the eye-tracker
Developer

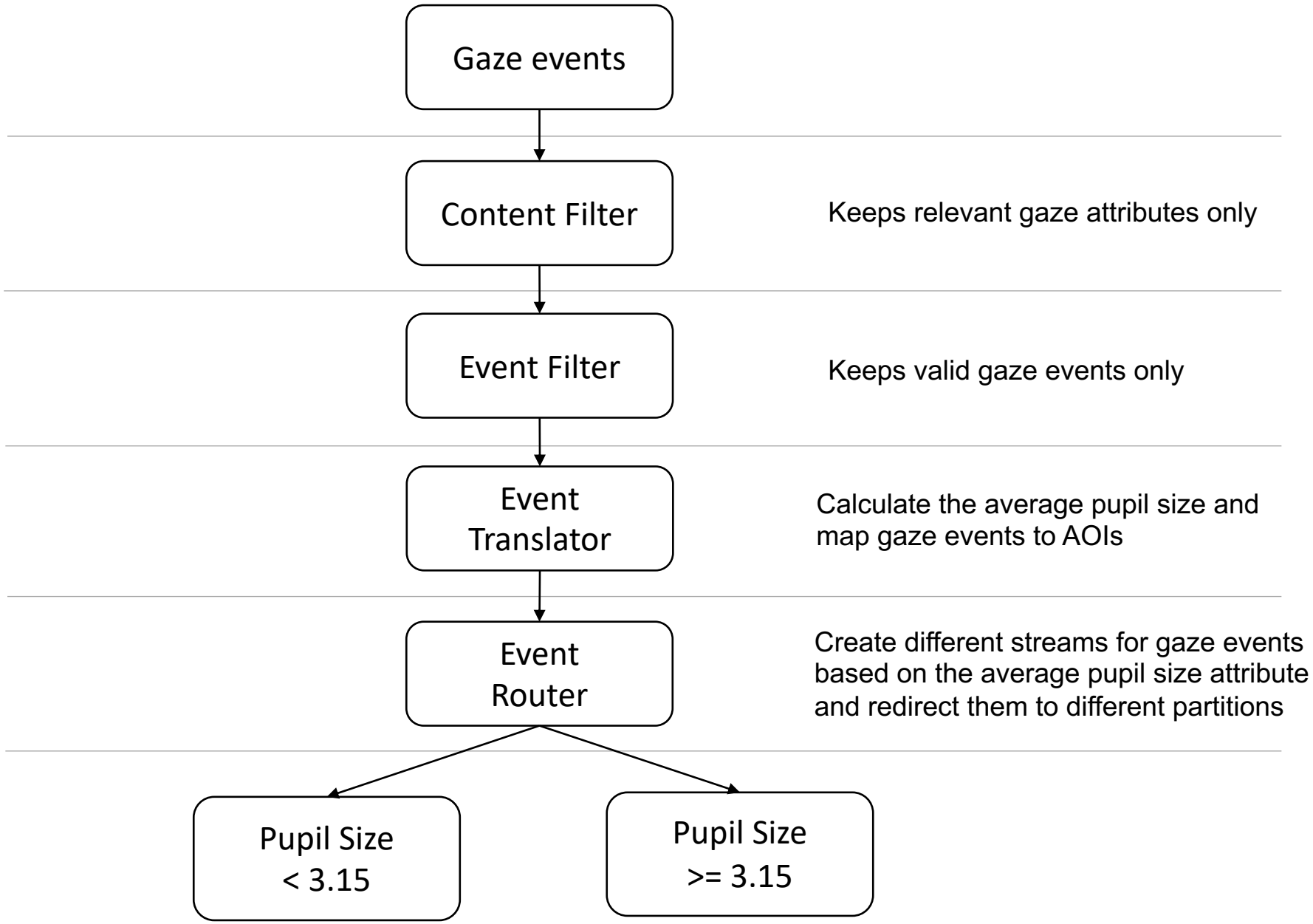

Content Filter
contentFilteredGazes
Stream
Filtered Stream
Gaze Events
with all attributes
Timestamp
XposLeft
YposLeft
XposRight
YposRight
ValidGazeLeft
ValidGazeRight
PupilSizeLeft
PupilSizeRight
ValidPupilSizeLeft
ValidPupilSizeRight
XDistance
YDistance
ZDistance
EventSource
SystemMemory
Timestamp
XposLeft
YposLeft
XposRight
YposRight
ValidGazeLeft
ValidGazeRight
PupilSizeLeft
PupilSizeRight
ValidPupilSizeLeft
ValidPupilSizeRight
Gaze Events with
relevant attributes only
Original Event
Filtered Event


contentFilteredGazes
Input Stream
Event Filter
eventFilteredGazes
Output Stream
Gaze Events with relevant attributes only
Valid gaze events only
gaze.isValidGazeLeft() &&
gaze.isValidGazeRight() &&
gaze.isValidPupilSizeLeft() &&
gaze.isValidPupilSizeRight()



- Compte xpos ad ypos from the left and right positions of gazes
- Compute average pupil size from the left and right pupil sizes
- Map the gaze x and y coordiantes to the corresponding area of interest (AOI)



- Route the gaze events based on different pupil size ranges

Overview of the whole pipeline