

Automatic Pose Synchronization

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Intermediate Presentation

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Project's Goal

Synchronize different pose streams in time



Minimize lag due to sampling



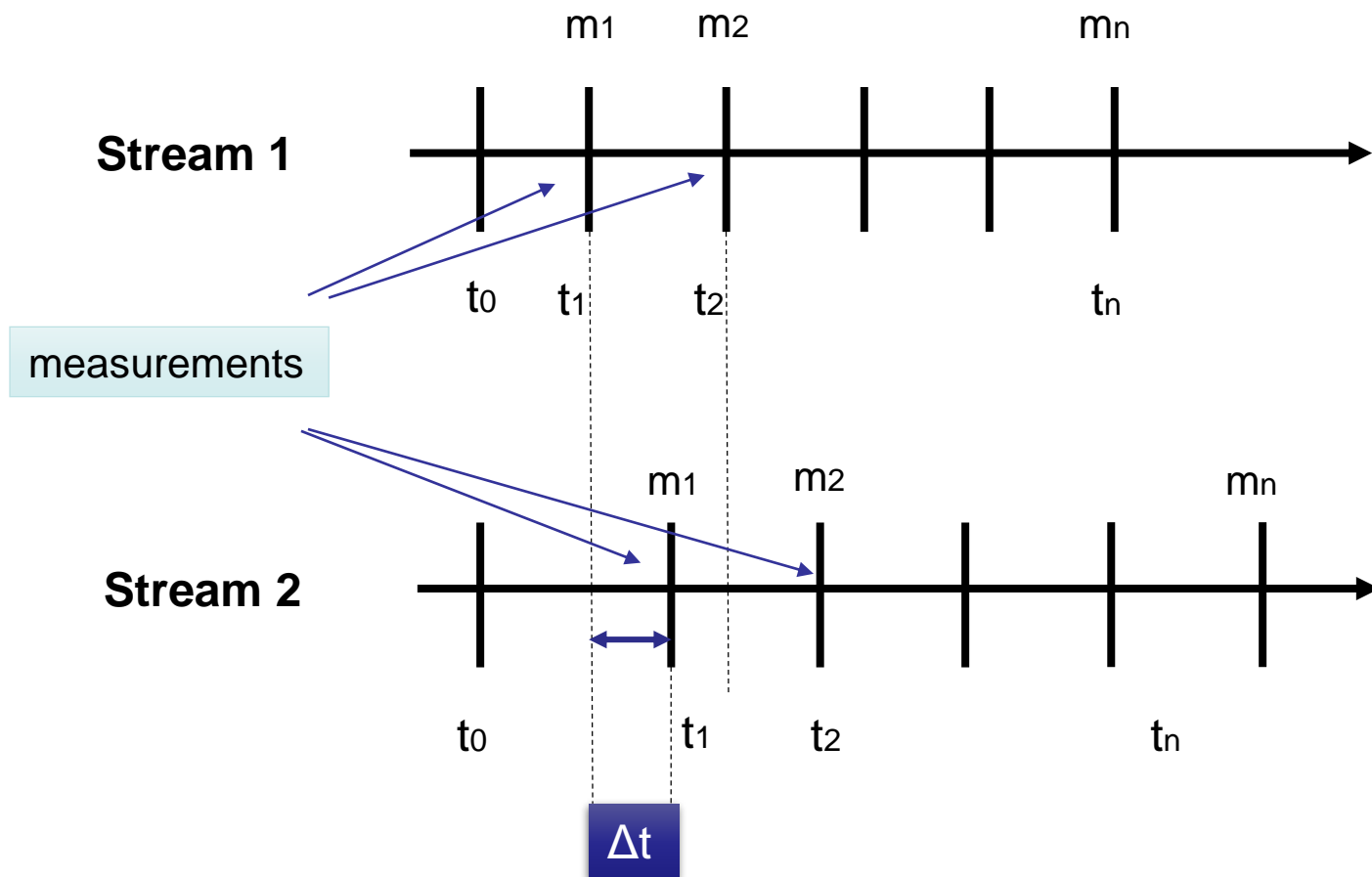
https://www.sapling-inc.com/blog/wp-content/uploads/2011/04/GettyImages_85406496.jpg (24/10/16)

Requirements and Specifications

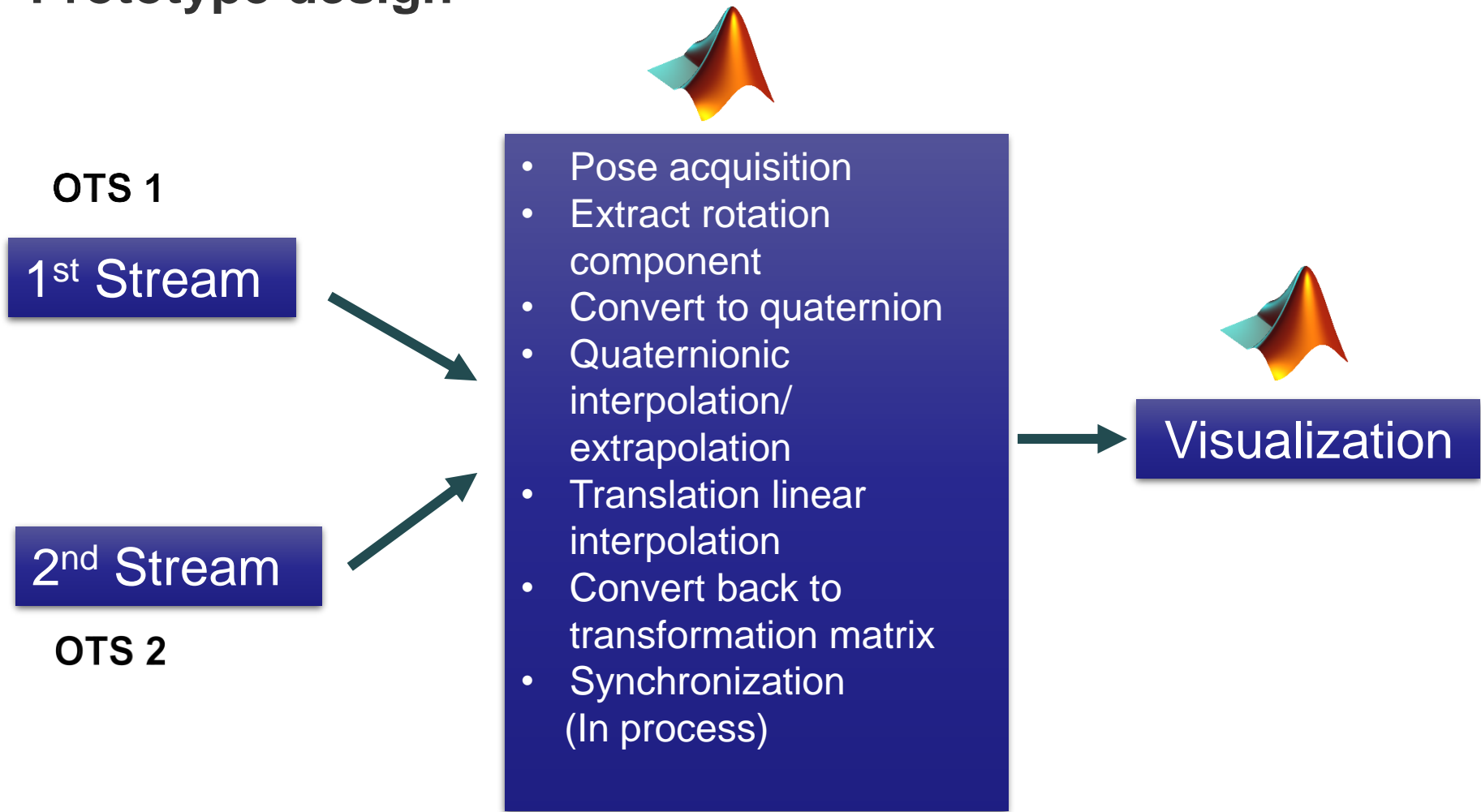
- Use of Quaternionic Upsampling¹
- Alignment of different tracking streams
- Visualization Framework
- Demo

[1] Source: B. Busam, M. Esposito, B. Frisch, N. Navab **Quaternionic Upsampling: Hyperspherical Techniques for 6 D-o-F Pose Tracking** *International Conference on 3DVision (3DV)*, Stanford University, California, USA, October 2016

Synchronization Problem



Prototype design



Tasks

Communication interface



Quaternionic Upsampling



Prototype – Synchronization of artificial data streams

In Process

Real time pose evaluation

to do

Debugging

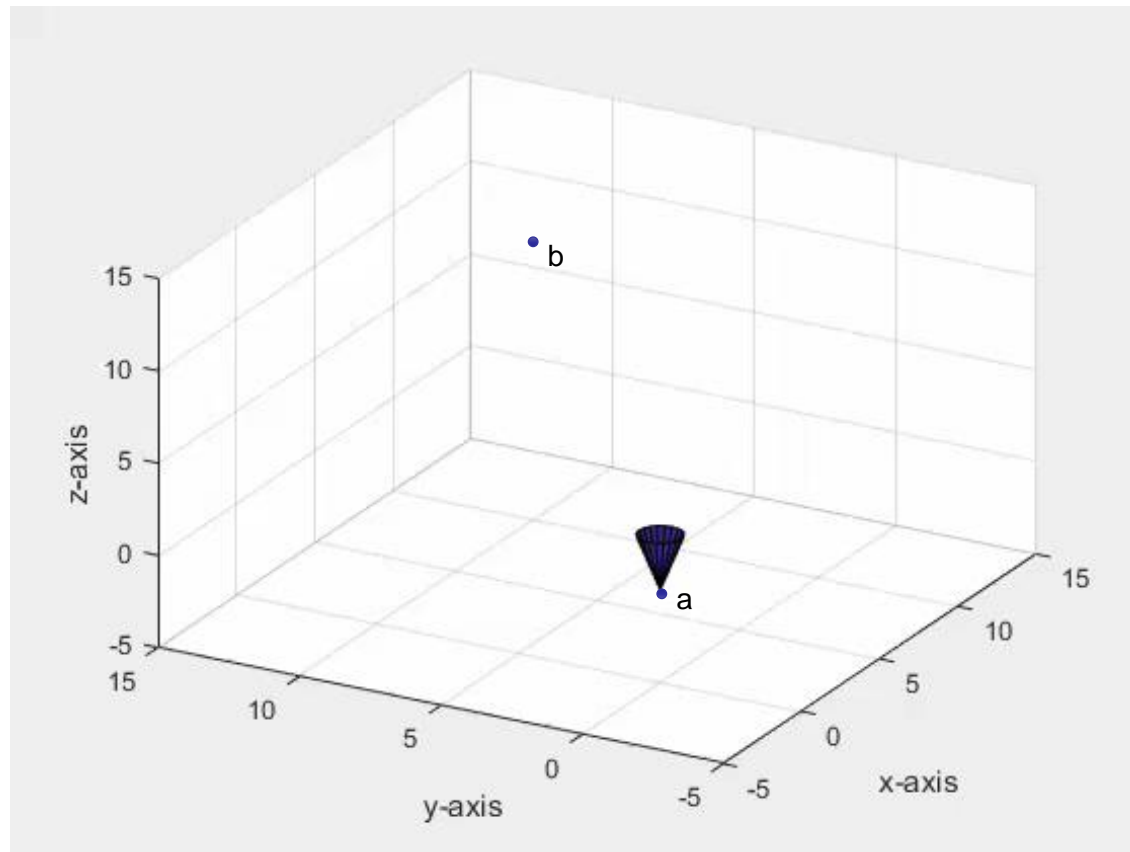
to do

Demo

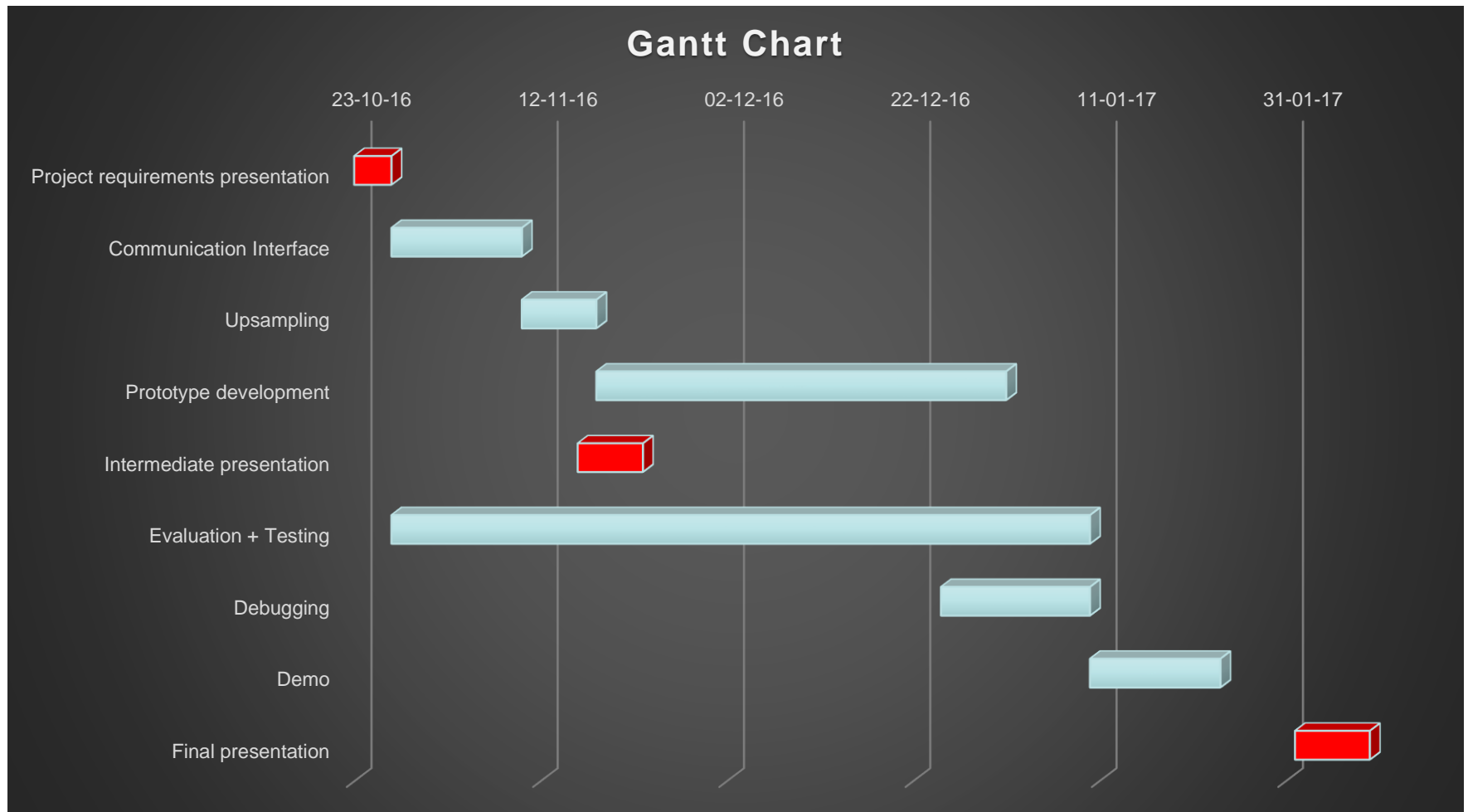
to do

So far ...

One stream visualization test



Time schedule reminder



Potential problems / risks

- Feasibility for the available time
- Software limitations
- Functionality of the prototype with the real poses



<http://cdn.xl.thumbs.canstockphoto.com/canstock21205812.jpg> 21/11/16

Thank you!

Questions??