Turning towards points of interest using a Saliency Map

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What have we achieved so far?

- Experiments with

  \textit{iLab Neuromorphic Vision C++ Toolkit}

  - (University of Southern California)

- Software Layout & Implementation Plan
The Neuromorphic Vision Toolkit
The Neuromorphic Vision Toolkit
The Neuromorphic Vision Toolkit

To example video (lab)
The Neuromorphic Vision Toolkit

Why use the toolbox?

→ Well designed and efficient calculation of Saliency Maps, human-like attention behaviour

→ Stable against changes of the point of view
Software Layout & Implementation

Ubuntu Host Computer
ROS Core

Ros Node
“Filter node”

next goal value for controller

Ros Node
“Robot Control”

steer commands, camera switching, odometry, cam images,

Virtual Machine
Neuromorphic Vision Toolbox
(Mandriva Linux)

Transmit Image
Receive Salient Point's Coords.

frontfacing camera's image
Implementation Plan

8\textsuperscript{th} July   \textit{filter-node done}

10\textsuperscript{th} July \textit{controller node done, begin testing on quadcopter}

12\textsuperscript{th} July \textit{begin fine-tuning}

15\textsuperscript{th} July \textit{ready for presentation, produce videos}

\textbf{Conclusion:} Some problems, but no major ones so far.