

Rink on Rails: On-Demand Interactive View Experience

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Motivation



Overview:

- Often times, many fans do not have optimum viewing angles during game-play.
- A panoramic view of the rink on the user's display device will provide for an enhanced viewing experience
- A scalable setup capable of supporting additional add-on cameras.

Objective

Synthesize multiple camera feeds to create a panoramic view of the rink and relay it to user device.

- Real-time
- Progressively adaptive

Development Environment

Hardware

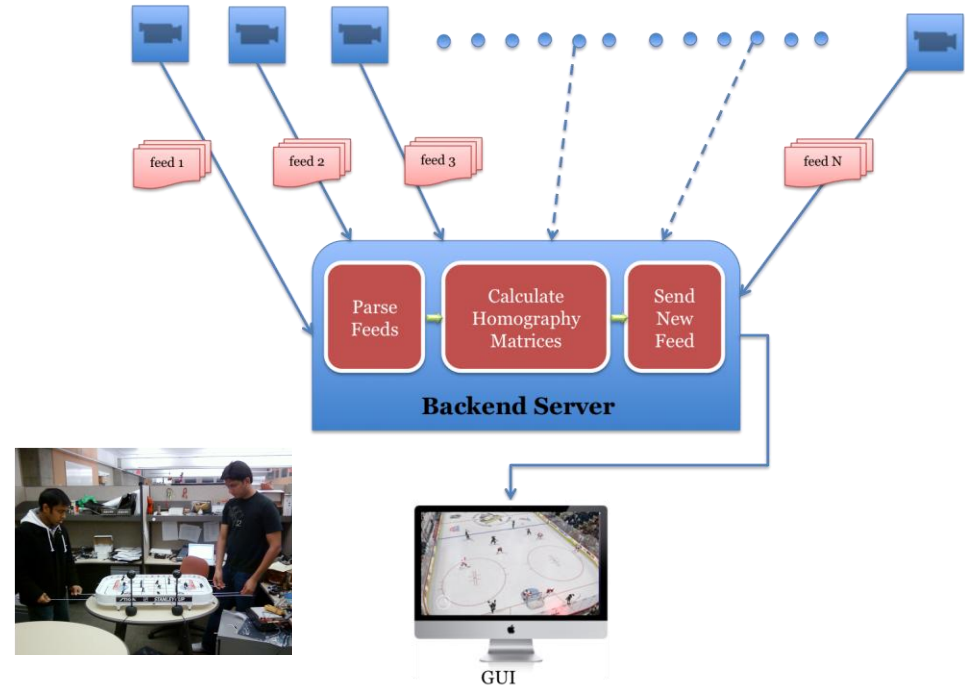
- Cameras
- PC

Software

- AForge
- Emgu
- Microsoft Silverlight ®



Architecture



Results

- Homography calculations are successful (see figure to right)
- Positions of cameras are determined with respect to each other
- GUI implements seamless experience to transition between different camera angles

