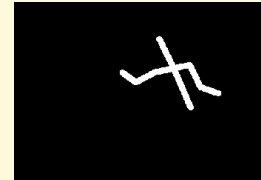
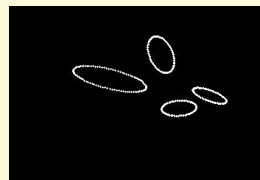




M. Tech. Introduction



Sharat Chandran

<http://www.cse.iitb.ac.in/~sharat>

July 2008

(For videos in this talk see: [scifi.avi](#) and [this directory](#). Thanks to the ViGIL Team:

[B. Choudhury](#), [A. Shaji](#), [S. Shanbhag](#), [A. Joshi](#), [R. Goradia](#), [M. Nithya](#), [Shamsuddin Ladha](#), [Sharat Chandran](#), [K. Anil](#), [D. Singla](#), [N. Sawant](#), [R. Jhunjunwala](#), [R. Ambareesha](#), [C. Dewan](#), [P. Hao](#), [K. Rai](#), [A. Aggarwal](#), [P. Ajmera](#), [L. Antani](#), [N. Aman](#), [Nekhil Agrawal](#), [Brahm Singh](#), [P. Kashyap](#), [A. Chandak](#), [B. Siddique](#).)

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Image Based Animation

- Conventional CG techniques for animation
 - Require scene geometry, surface properties
 - Lots of hard work, and time to produce reasonable animation





Image Based Animation

- Conventional CG techniques for animation
 - Require scene geometry, surface properties
 - Lots of hard work, and time to produce reasonable animation



- Can we work with only photographs?





Image Based Animation

- Conventional CG techniques for animation
 - Require scene geometry, surface properties
 - Lots of hard work, and time to produce reasonable animation



- Can we work with only photographs?





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Working With Me (Research): Image-Based-Rendering



Introducing a transparent horse, exhibiting refractive and reflective properties, in various scenes (image courtesy: Deepali Singla (M.Tech Dissertation) & Biswarup Choudhury)



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1. Working With Me

- Courses, Project



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1. Working With Me

- Courses, Project
- Teaching: Teaching is not mere instruction, but also inspiration
- Current View of M.Tech students: Help in bringing into focus the research capability. This means it's a good idea to choose to work with me earlier, rather than later.
- Demand that research be fun



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1. Working With Me

- Courses, Project
- Teaching: Teaching is not mere instruction, but also inspiration
- Current View of M.Tech students: Help in bringing into focus the research capability. This means it's a good idea to choose to work with me earlier, rather than later.
- Demand that research be fun
- Live: Either in VR lab/VIGIL (CSE Dept Bldg), or Office in Rekhi Bldg A202



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2. Working With Me: Courses

This semester

- CS 663: Digital Image Processing
- CS 694: Seminar



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2. Working With Me: Courses

This semester

- CS 663: Digital Image Processing
- CS 694: Seminar
- It is essential that you take the seminar with me this semester. Almost surely, I will not be offering seminar next semester.
- You can opt out of a m.tech project after your seminar. However the default is that you will be opting in.



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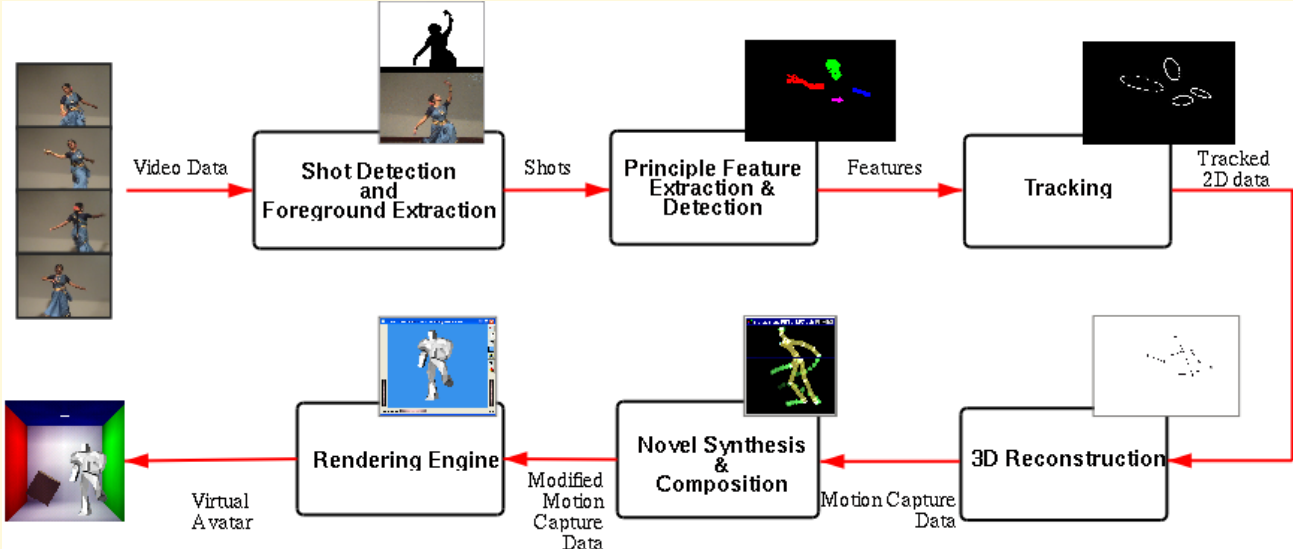
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Context





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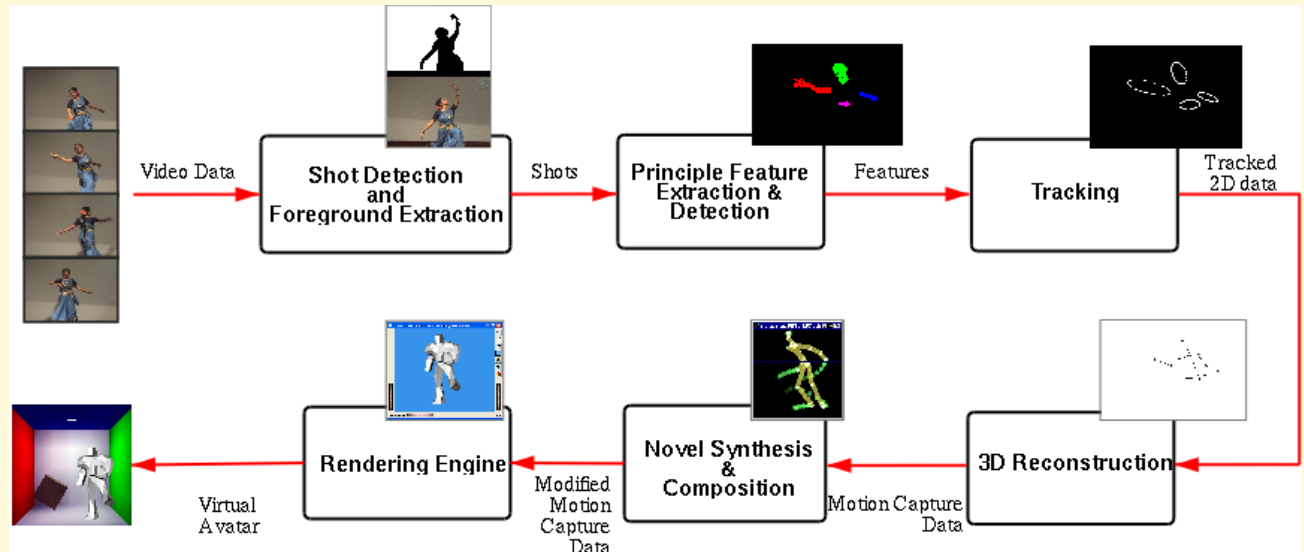
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Context



Work within the limited resources in the Indian context.



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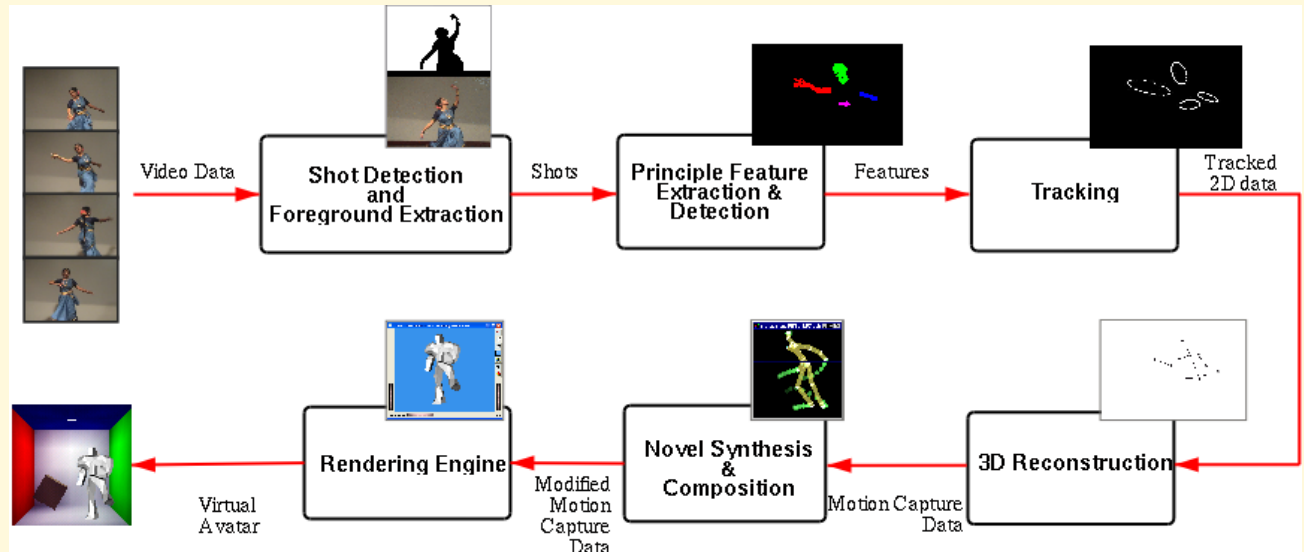
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Context



Work within the limited resources in the Indian context. Focus generally on human character models



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3. Topics

- Listed
 1. Medical Imaging
 2. Point Based Rendering.
 3. Tracking
 4. Motion Capture Reconstruction
 5. Multiprojector multicamera systems
 6. Rendering Engine



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3. Topics

- Listed

1. Medical Imaging
2. Point Based Rendering.
3. Tracking
4. Motion Capture Reconstruction
5. Multiprojector multicamera systems
6. Rendering Engine

- Unlisted

1. Anything you like that deals with pictures, videos



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4. Possible Thoughts

- Are there interesting research problems?



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4. Possible Thoughts

- Are there interesting research problems?
- Will I get a job after I finish?



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4. Possible Thoughts

- Are there interesting research problems?
- Will I get a job after I finish? (Will I finish?)



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4. Possible Thoughts

- Are there interesting research problems?
- Will I get a job after I finish? (Will I finish?)
- How difficult is the topic?



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4. Possible Thoughts

- Are there interesting research problems?
- Will I get a job after I finish? (Will I finish?)
- How difficult is the topic?
- Why should I join IIT/CSE/ViGIL



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4. Possible Thoughts

- Are there interesting research problems?
- Will I get a job after I finish? (Will I finish?)
- How difficult is the topic?
- Why should I join IIT/CSE/ViGIL
- How good is the advisor?



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4. Possible Thoughts

- Are there interesting research problems?
- Will I get a job after I finish? (Will I finish?)
- How difficult is the topic?
- Why should I join IIT/CSE/ViGIL
- How good is the advisor?
- What topic will I work on