MotionVis

Donovan Parks
Introduction

- Large motion capture DB’s widely used in the film and video game industries

- This has created a desire to be able to search these databases for similar motions

- Bases of automated methods for synthesizing new motions from MoCap data
Project Goal

- Numerous similarity metrics have been proposed:
  - Which of these should be preferred?
  - What are their respective strengths and weaknesses?
  - How can a given metric be improved?

- Develop an environment for analyzing the structure of a motion capture DB under a given similarity metric
Project Overview

MoCap DB → Similarity Metric → Dissimilarity Matrix → MDS

Scatterplot View
Proposed Solution

- Couple scatterplot view with a "details-on-demand" view
Remaining Work

- Tighter coupling between views:
  - Clicking a skeleton should highlight associated point in scatterplot
  - Hovering over a point should highlight associated row and column in dissimilarity matrix

- Select “good” colours for skeletons

- Plus the other 10 items on my to-do list
Literature

- **Implemented similarity metric:**

- **Other similarity metrics:**

- **Related InfoVis papers:**