# FencingVis

Roy G. Biv, Ed Grimley, Member, IEEE, and Martha Stewart

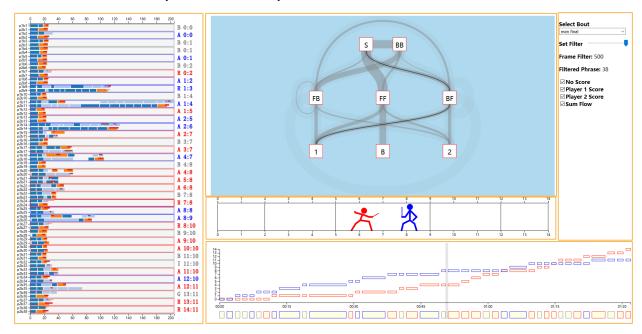


Fig. 1. In the Clouds: Vancouver from Cypress Mountain. Note that the teaser may not be wider than the abstract block.

Abstract—Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi.

Index Terms—Radiosity, global illumination, constant time

#### 1 Introduction

[5] [3] [1] [4] [2] This template is for papers of VGTC-sponsored conferences such as IEEE VIS, IEEE VR, and ISMAR which are published as special issues of TVCG. The template does not contain the respective dates of the conference/journal issue, these will be entered by IEEE as part of the publication production process.

of our system.

### 2 RELATED WORK

#### 2.1 Analysis and Visualization for Fencing

## 2.2 Sports Visualization

## 3 BACKGROUND AND SYSTEM OVERVIEW

We will introduce the background knowledge of fencing, as long as the data we used and the analysis target. We will also give the main picture

- Roy G. Biv is with Starbucks Research. E-mail: roy.g.biv@aol.com.
- Ed Grimley is with Grimley Widgets, Inc.. E-mail: ed.grimley@aol.com.
- Martha Stewart is with Martha Stewart Enterprises at Microsoft Research. E-mail: martha.stewart@marthastewart.com.

Manuscript received xx xxx. 201x; accepted xx xxx. 201x. Date of Publication xx xxx. 201x; date of current version xx xxx. 201x. For information on obtaining reprints of this article, please send e-mail to: reprints@ieee.org. Digital Object Identifier: xx.xxxx/TVCG.201x.xxxxxxx

#### 3.1 Background

sabre
game
bout
phrase
offensive / defensive

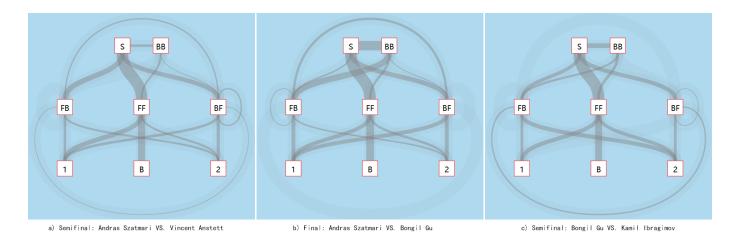


Fig. 2. A visualization of the data from ??. The image is from [?] and is in the public domain.

- 3.2 Data Description
- 3.3 Requirement Analysis
- 3.4 System Overview
- 4 FENCINGVIS
- 4.1 Bout View
- 4.2 Motion View
- 4.3 Tactic Flow View
- 4.4 Animation Replay
- 4.5 Interaction
- 4.6 Cross-View Analysis
- 5 CASE STUDY
- 6 CONCLUSION

### **ACKNOWLEDGMENTS**

The authors wish to thank A, B, C. This work was supported in part by a grant from XYZ.

## REFERENCES

- [1] C. Perin, J. Boy, and F. Vernier. Using gap charts to visualize the temporal evolution of ranks and scores. *IEEE computer graphics and applications*, 36(5):38–49, 2016.
- [2] C. Perin, R. Vuillemot, and J.-D. Fekete. Soccerstories: A kick-off for visual soccer analysis. *IEEE transactions on visualization and computer* graphics, 19(12):2506–2515, 2013.
- [3] T. Polk, J. Yang, Y. Hu, and Y. Zhao. Tennivis: Visualization for tennis match analysis. *IEEE transactions on visualization and computer graphics*, 20(12):2339–2348, 2014.
- [4] D. Sacha, M. Stein, T. Schreck, D. A. Keim, O. Deussen, et al. Feature-driven visual analytics of soccer data. In Visual Analytics Science and Technology (VAST), 2014 IEEE Conference on, pp. 13–22. IEEE, 2014.
- [5] Y. Wu, J. Lan, X. Shu, C. Ji, K. Zhao, J. Wang, and H. Zhang. ittvis: Interactive visualization of table tennis data. *IEEE Transactions on Visualization and Computer Graphics*, 24(1):709–718, Jan 2018. doi: 10.1109/TVCG. 2017.2744218