

Principles and design choices

domain
abstraction
idiom
algorithm

What?
Why?
How?

Visualization Analysis & Design

Geometry Center 1990-1995

Geoview

The Shape of Space

Outside In

Charlie Gunn Stuart Levy Mark Phillips Deile Maxwell

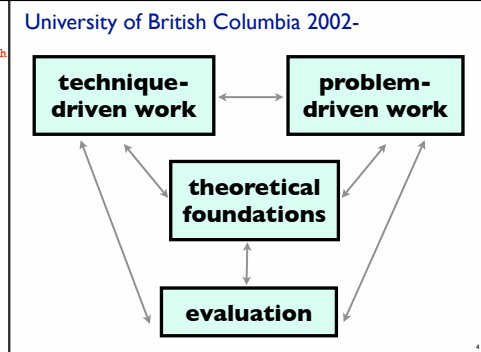
Stanford 1995-2000

Constellation

Pat Hanrahan

Diane Tang Chris Stolte Robert Bosch

Maneesh Agrawala Francois Guimbretiere



Technique-driven: Graph drawing

TreeJuxtaposer

James Slack Kristian Hildebrand

Daniel Archambault David Auber (Bordeaux)

TopoLayout
SPF
Grouse
GrouseFlocks
TugGraph

Evaluation: Graph drawing

Stretch and squish navigation

Dmitry Nekrasovski Adam Bodnar Joanna McGrenere (UBC)

Jessica Dawson

Search set model of path tracing

Technique-driven: Dimensionality reduction

Glimmer

DimStiller

Stephen Ingram

Glint

QSNE

Evaluation: Dimensionality reduction

Points vs landscapes for dimensionally reduced data

Guidance on DR & scatterplot choices

Melanie Tory

Michael Sedlmair Melanie Tory (UVic)

Taxonomy of cluster separation factors

Problem-driven: Genomics

Cerebral

Aaron Barsky Jenn Gardy (Microbio) Robert Kincaid (Agilent)

Miriam Meyer Hanspeter Pfister (Harvard)

MizBee

Multesum, Pathline

Problem-driven: Genomics, fisheries

Variant View

Joel Forstay Cydney Nielsen (BC Cancer)

Vision

Maryam Booshehrian Torsten Moeller (SFU)

Problem-driven: Many domains

SessionViewer: web log analysis

Heidi Lam Diane Tang (Google)

Peter McLachlan Stephen North (AT&T Research)

LiveRAC: systems time-series

Evaluation: Focus+Context

Distortion impact on search/memory

Separate vs integrated views

Heidi Lam Ron Rensink (UBC)

Heidi Lam Robert Kincaid (Agilent)

Journalism

TimeLineCurator

Matt Brehmer Stephen Ingram Jonathan Stray (Assoc Press)

Johanna Fulda (Sud. Zeitung) Matt Brehmer

Theoretical foundations

Design Study Methodology

Abstract Tasks

Michael Sedlmair Miriah Meyer

Matt Brehmer

domain
abstraction
idiom
algorithm

Nested Model

- Visual Encoding Pitfalls
 - Unjustified Visual Encoding
 - Hammer in Search of Nail
 - 2D Good, 3D Better
 - Color Cacophony
 - Rainbows Just Like In The Sky
- Strategy Pitfalls
 - What I Did Over My Summer
 - Lean Palindromic Line
 - Dense As Plutonium
 - Bad Slice and Dice

Thanks to many!