VIS 2015

25-30 October, Chicago, Illinois, USA

VAST Challenge – Celebrating 10 Years of Participation

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

The Visual Analytics Science and Technology (VAST) Challenge is an annual contest with the goal of advancing the field of visual analytics through competition. The VAST Challenge is designed to help researchers understand how their software would be used in a novel analytic task and determine if their data transformations, visualizations, and interactions would be beneficial for particular analytic tasks. VAST Challenge problems provide researchers with realistic tasks and data sets for evaluating their software, as well as an opportunity to advance the field by solving more complex problems.

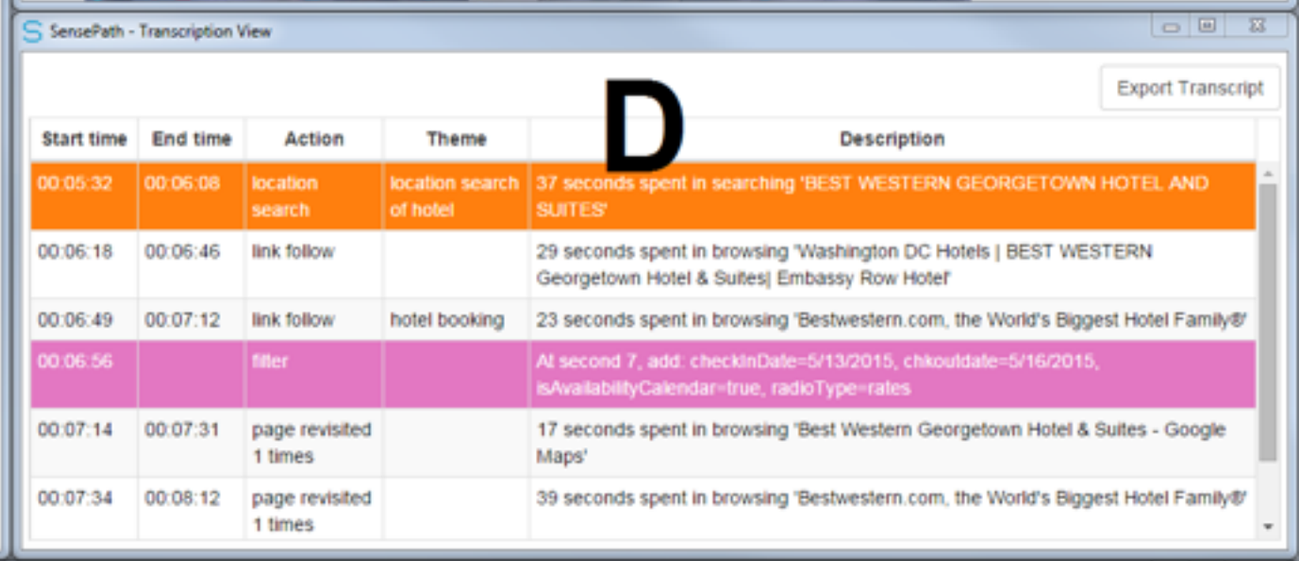
Researchers and software providers have repeatedly used the data sets from throughout the life of the VAST Challenge as benchmarks to demonstrate and test the capabilities of their systems. The ground truth embedded in the data sets has helped researchers evaluate and strengthen the utility of their visualizations.

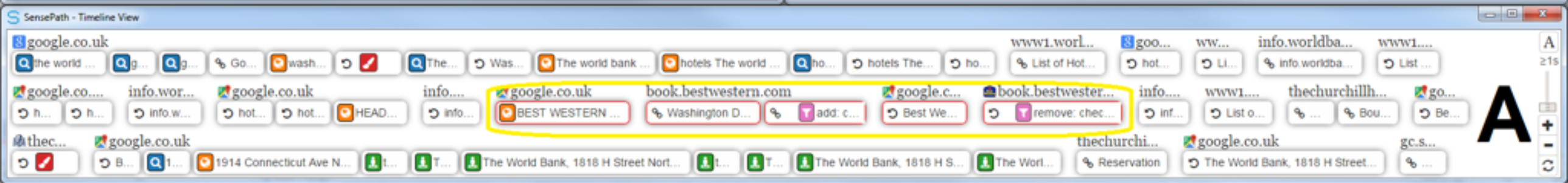
We celebrate our 10th annual VAST Challenge with a look back at the Awards and Honorable Mentions from the past ten years.

SensePath


Washington DC Hotels | B
book.bestwestern.com/bestwestern/US/DC/Washington-hotels/BEST-WESTERN-Georgetown-Hotel
Group Reservations
Customer Care
Check Reservations
HOME
EXPLORE HOTELS
REWARDS
TRAVEL PLANNING
MY ACCOUNT
B
SHARE
ADD TO FAV
BEST WESTERN
Georgetown
Hotel & Suites
EDIT YOUR SEARCH
Destination
Washington, District Of Columbia, United States
Change Destination
Check In
Check Out
04/01/2015
04/02/2015
Room(s)
Adult(s)
Child(ren)
Child Policy
Special Rates
Make the BEST WESTERN Georgetown your next home away from home while exploring Washington DC.
Photo
Exterior
Lobby
Lobby
Lobby
Business Center
OVERVIEW
AMENITIES
DINING
DISCOUNTS & PACKAGES
LOCAL ATTRACTIONS
MAPS/ DIRECTION
BEST WESTERN Georgetown Hotel & Suites
1121 New Hampshire Avenue NW


SensePath - Replay View
Play Within Selection
C
06:18


SensePath - Transcription View
Export Transcript
D
Start time
End time
Action
Theme
Description
00:05:32
00:06:08
location search
location search of hotel
37 seconds spent in searching 'BEST WESTERN GEORGETOWN HOTEL AND SUITES'
00:06:18
00:06:46
link follow
29 seconds spent in browsing 'Washington DC Hotels | BEST WESTERN Georgetown Hotel & Suites| Embassy Row Hotel'
00:06:49
00:07:12
link follow
hotel booking
23 seconds spent in browsing 'Bestwestern.com, the World's Biggest Hotel Family®'
00:06:56
filter
At second 7, add: checkInDate=5/13/2015, chkoutdate=5/16/2015, isAvailabilityCalendar=true, radioType=rates
00:07:14
00:07:31
page revisited 1 times
17 seconds spent in browsing 'Best Western Georgetown Hotel & Suites - Google Maps'
00:07:34
00:08:12
page revisited 1 times
39 seconds spent in browsing 'Bestwestern.com, the World's Biggest Hotel Family®'


SensePath - Timeline View
google.co.uk
book.bestwestern.com
BEST WESTERN ...
Washington D...
add: c...
remove: chec...
A
≥1s

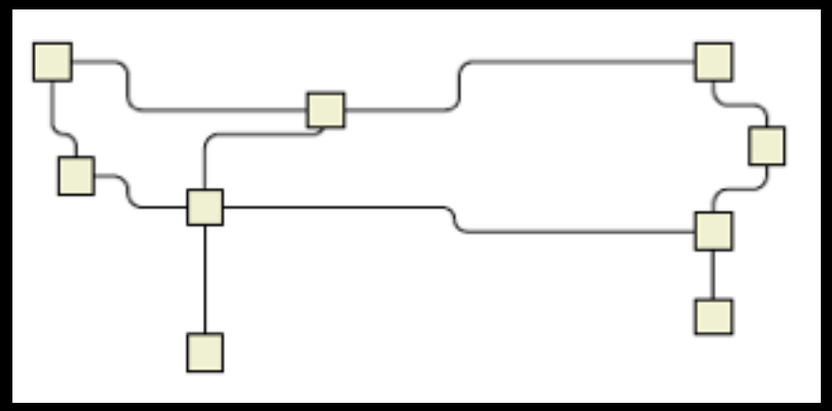
HOLA: Human-like Orthogonal Network Layout

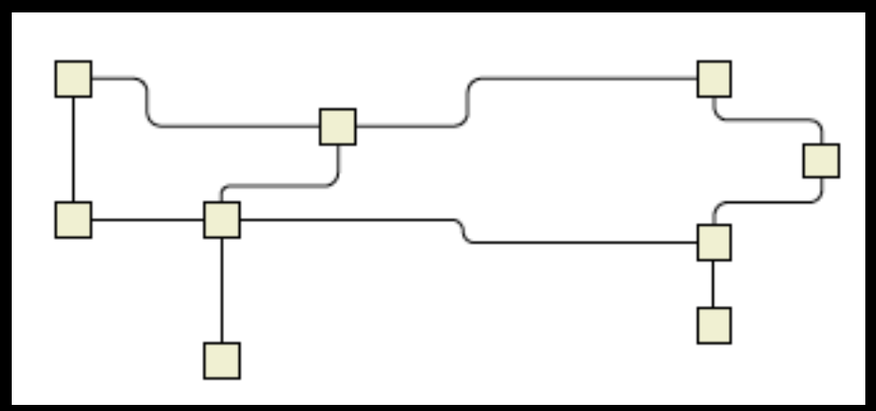
1. Conduct a user study to determine the aesthetic criteria that humans value

2. Develop an algorithm that encodes these aesthetics

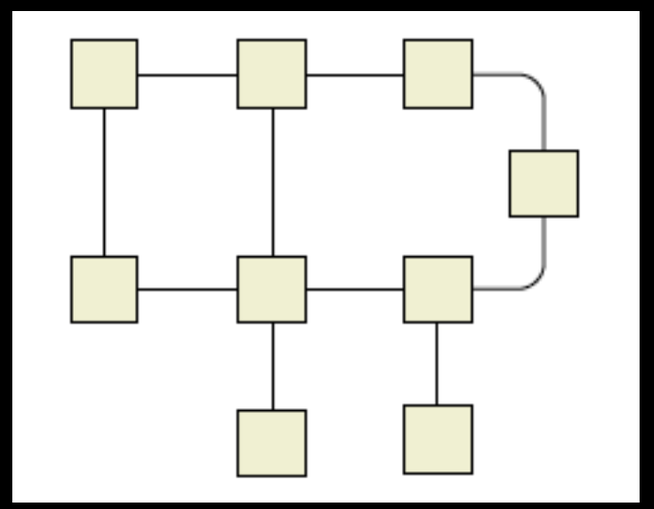
3. Conduct another user study to evaluate the algorithm

HOLA - Study 1

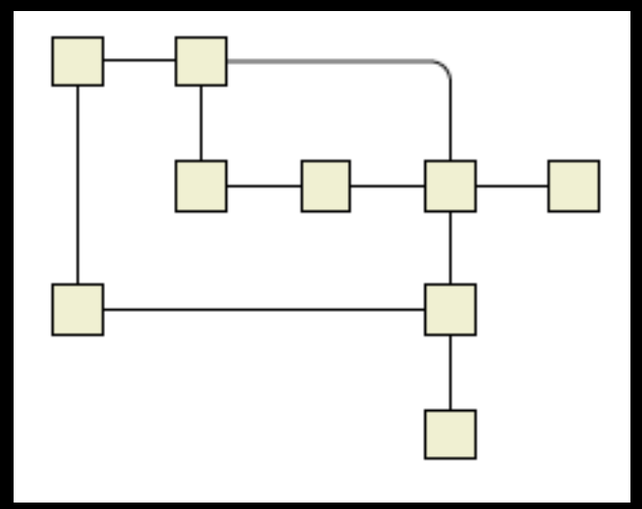




worst



best



yFiles

HOLA - Study 1 Results

human layout >> yFiles

+compactness

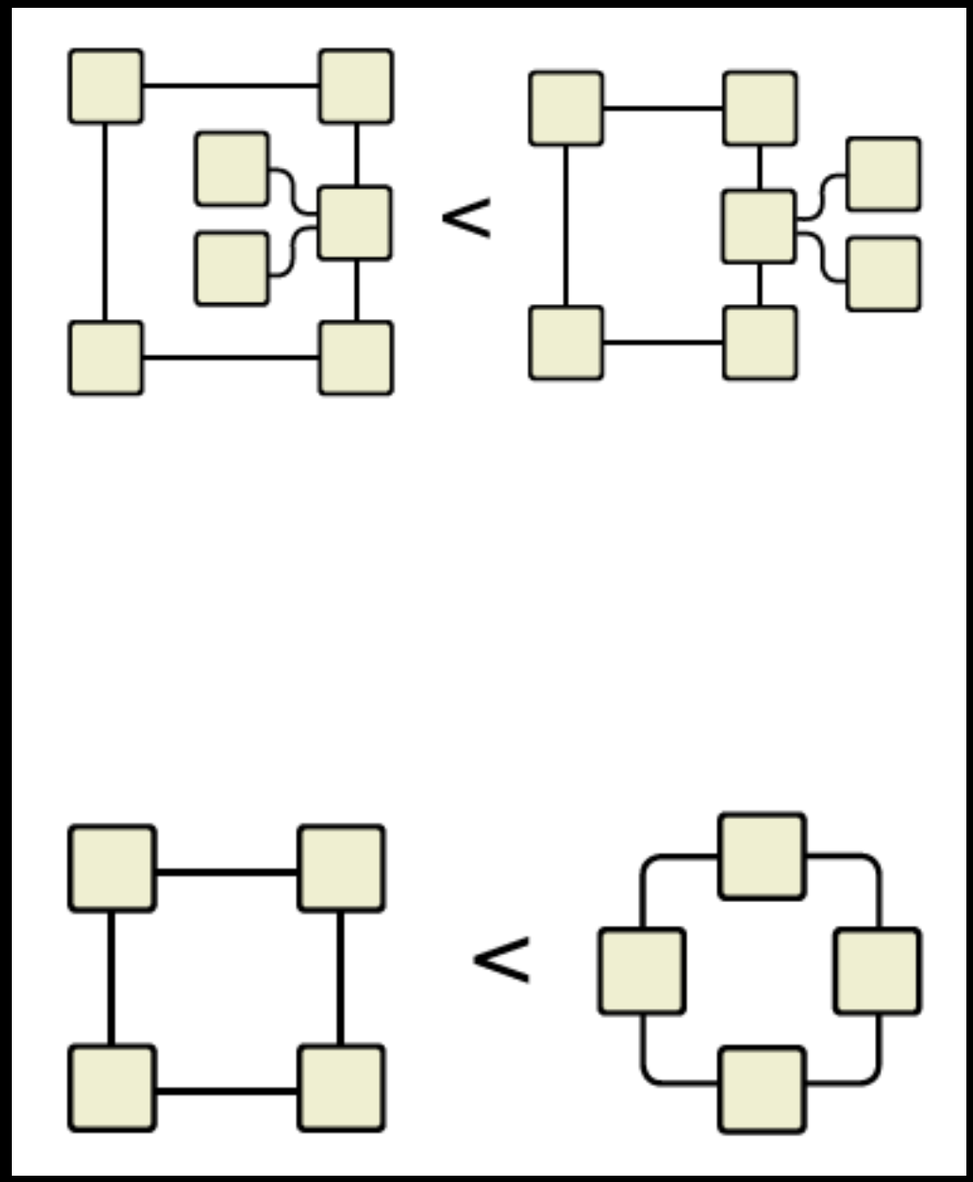
+grid-like

+symmetry

— edge crossings

— edge bends

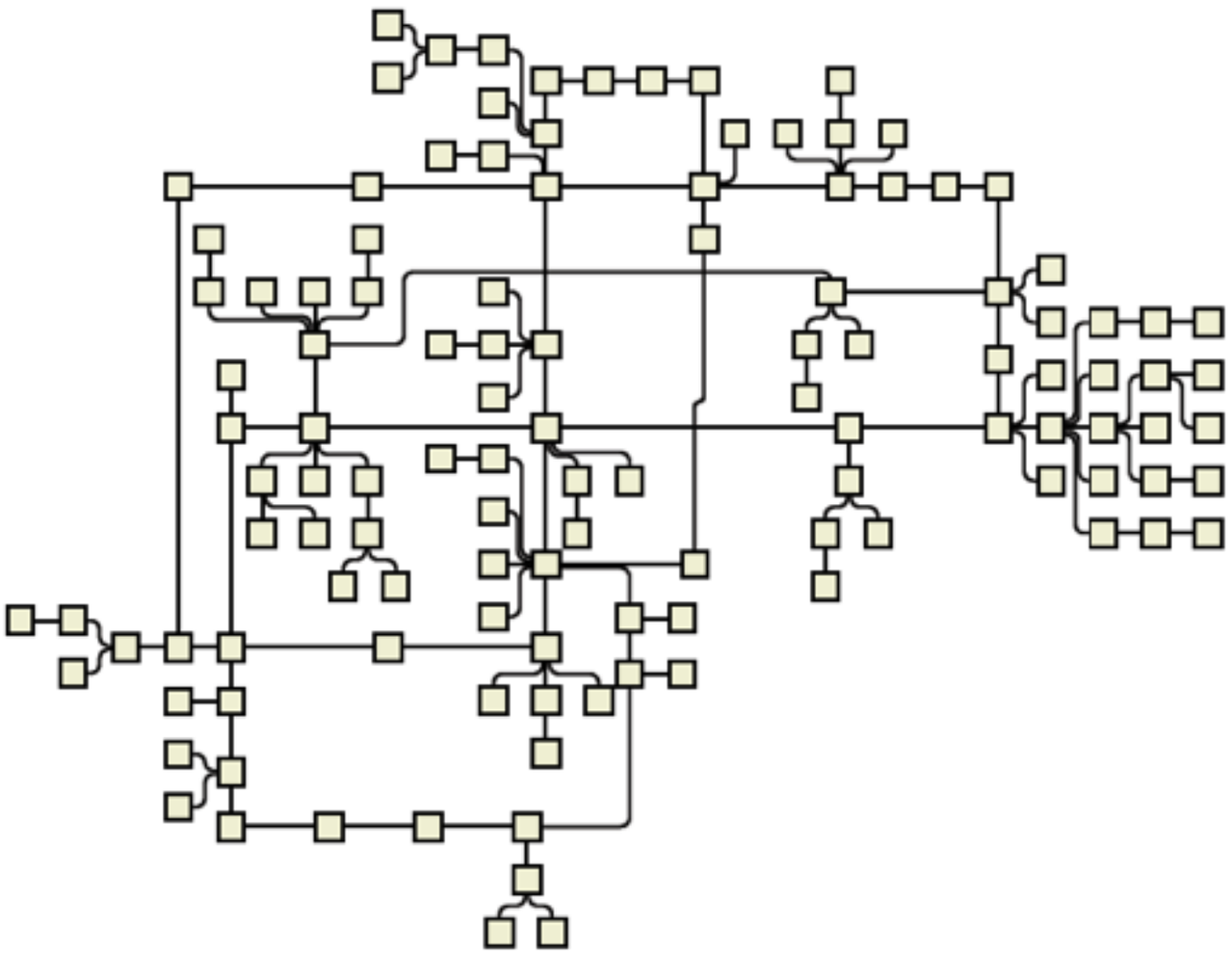
— edge segment lengths

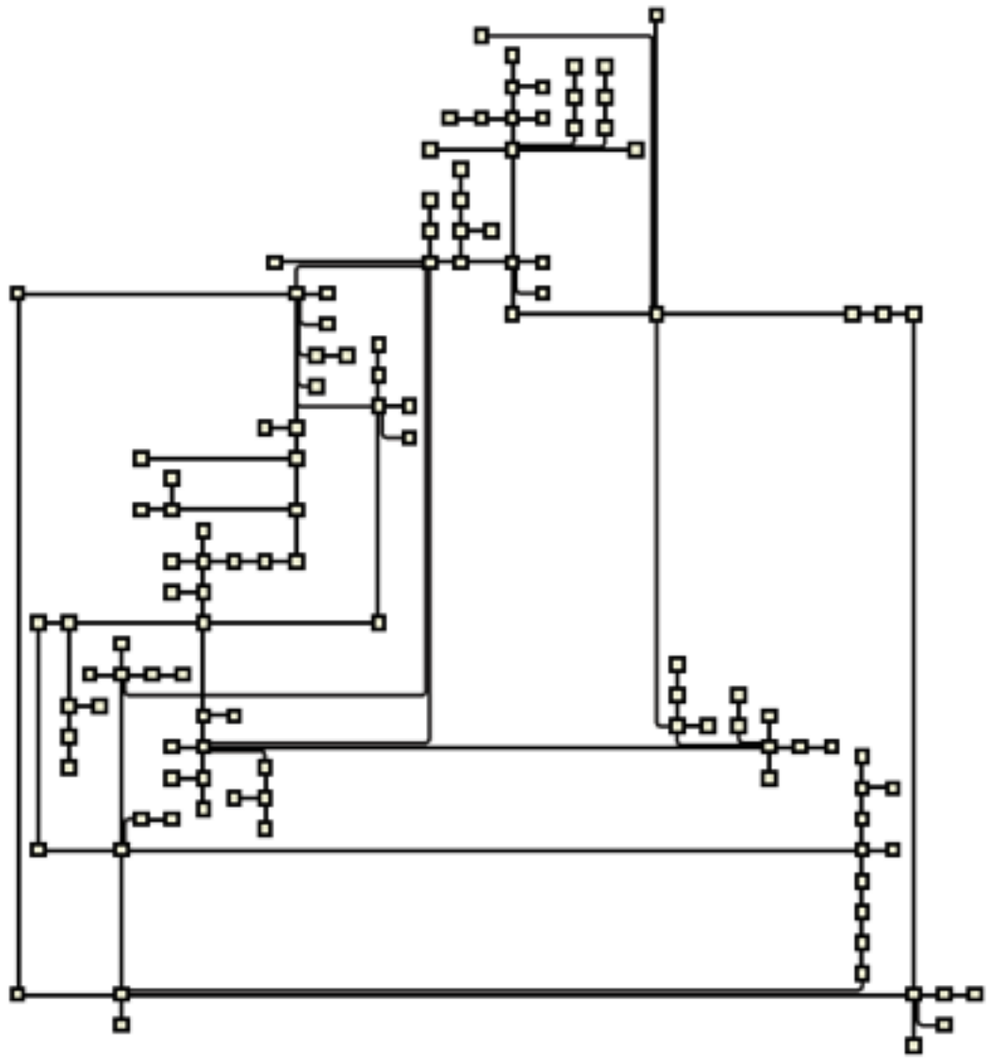


HOLA - Study 2

- human-like & HOLA >> yFiles
- HOLA >> yFiles for large graphs
  - preference
  - time
  - accuracy

HOLA vs. yFiles





Data Science

Data Science using Python :
A Survival Pack

IEEE Vis 2015

- Introduction
- NumPy recap & Introduction to Pandas
- Pandas exercises
- Seaborn intro
- Introduction to scikit-learn
- scikit-learn exercises

https://github.com/stefanv/ds_intro

launch binder

Stéfan van der Walt

Symposium on Visualization in Data Science (VDS at IEEE VIS 2015)

Back to IEEE VIS 2015

VDS 2015

Monday, October 26th, 2015

Menu

Affilliated Tutorial

A Practical Introduction to Data Science in Python
Sunday, October 25th, 2015

Important Dates

Vision

Transformations in many fields are enabled by rapid advances in our ability to acquire and generate data. The bottleneck to discovery is now our ability to analyze and make sense of heterogeneous, noisy, and often massive datasets. Extracting knowledge from this abundance of data lies at the heart of 21st century discovery.

We truly are at the dawn of a revolutionary new era. Data science is the practice of deriving insight from data, at the intersection of the disciplines of statistical methodology, computer science, and one or more traditional scholarly fields. Data science includes the methodological fields of visualization, statistics, applied mathematics, data management, artificial intelligence, and machine learning. It drives discoveries in business, economy, biology, medicine, environmental science, the physical sciences, the humanities and social sciences, and beyond.

Visualization is an integral part of data science, and essential to enable sophisticated analysis of data. The first Symposium on Visualization in Data Science (VDS) at IEEE VIS 2015 will bring together domain scientists and methods researchers (including data visualization, usability, data management, artificial intelligence, machine learning, statistics, programming environments, scalable software). Our goal is to bring together practitioners and researchers in data science and visualization to discuss common interests, talk about practical issues, and identify open research problems.

Prof. Hanspeter Pfister

CS109 Data Science

VIS 2016

VAST • INFOVIS • SCIVIS

23-28 October 2016

Baltimore, Maryland, USA

IEEE vgtc · IEEE · IEEE computer society