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Spring Summit 2017
- Welcome and Introduction -

Michael Berthold

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#KNIMESummit2017

Predictive Analytics at Work

Star Attendees

9: Takahiro Ohshima

8: Eugen Deretey
Jean-Christophe Mozziconacci

7: Klaus-Peter Huber
Nils Weskamp

Agenda

- Hot Topics and KNIME

- A Brief Look back at 2016

- The 2017 Spring Summit!

Hot Topics:
Modern AI in a Nutshell

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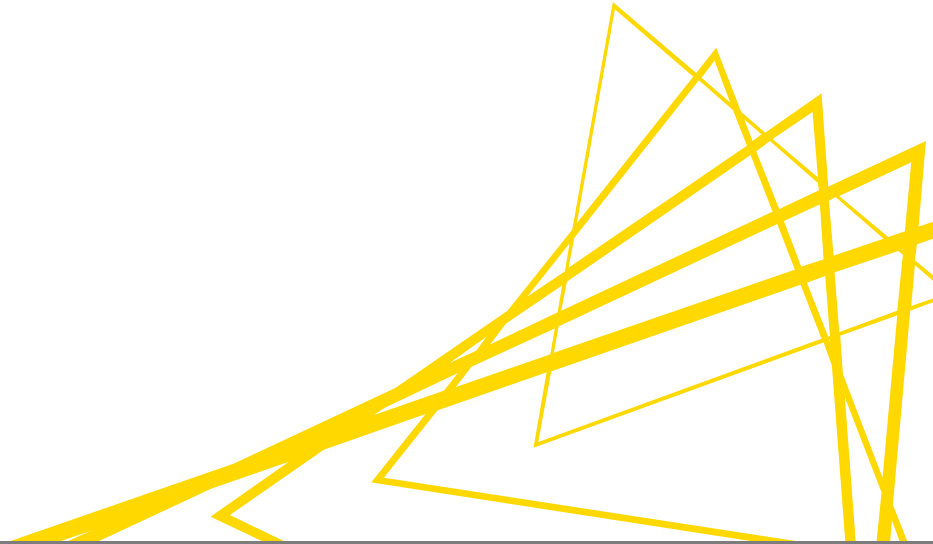
Recent Topics (NIPS)

- Reinforcement Learning

- Recurrent Neural Networks

- Graphical Models

- Learning Rates, Stochastic Gradient Descent, Weight Normalization...

- Autonomous Car Driving Demos

- Wait: that was 1997

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Recent Topics (NIPS 2016!)

- Reinforcement **Deep** Learning

- Recurrent **Deep** Networks

- Graphical Models

- Learning Rates, Stochastic Gradient Descent, Weight Normalization…

- Autonomous Car Driving Demos
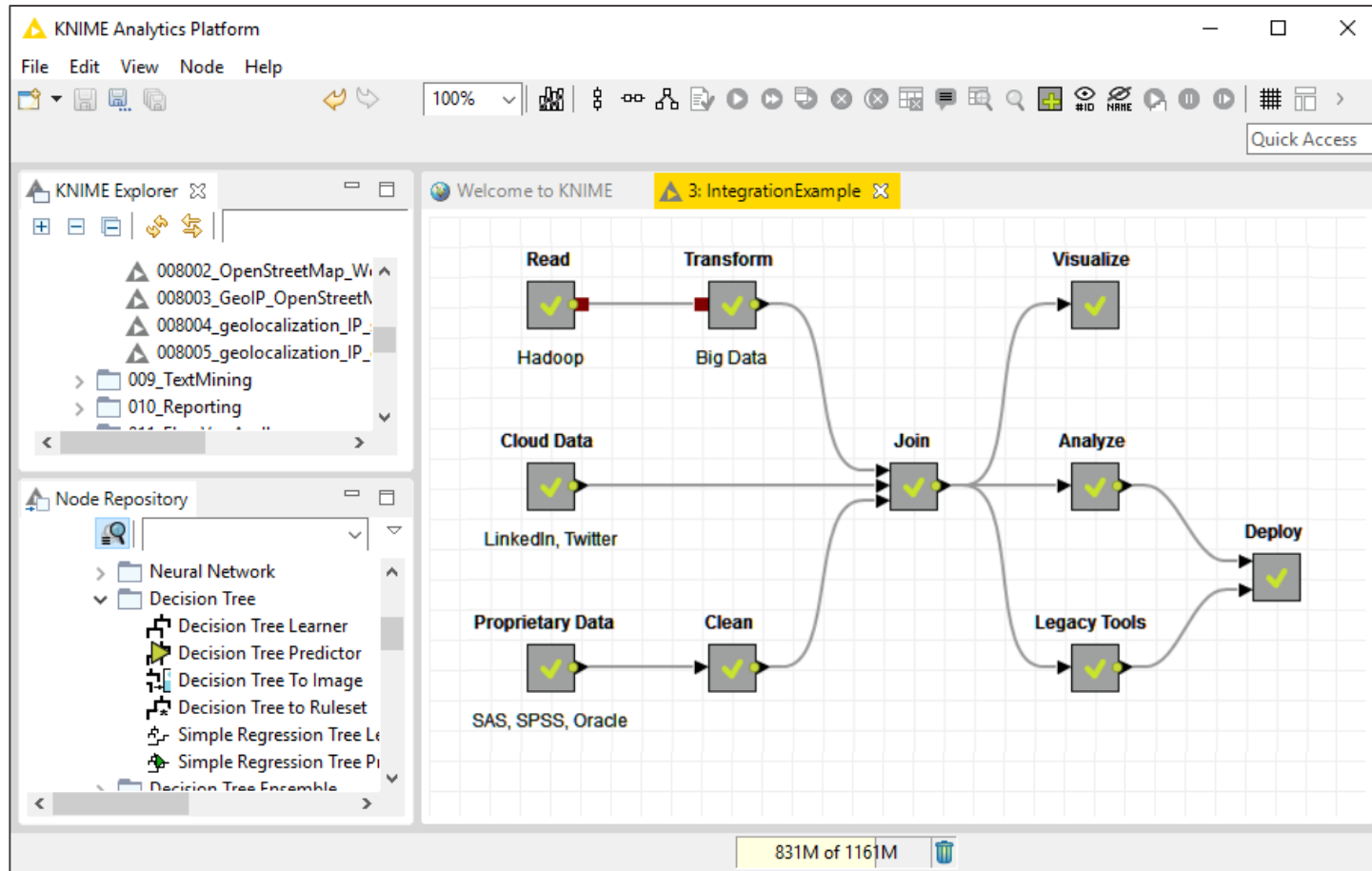
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AI: Hype vs. Reality

"Temper Your Expectations, But Don't Give Up On AI"

Mike Gualtieri (Forrester)

(pure AI is the hype, pragmatic AI is what we get)

~~Boring Topic:~~
~~Data Integration~~

Hot Topic:

Data Blending

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Visual Data (and Tool!) Blending

Will They Blend? blog post series

Table of content

- SAS, SPSS, and MATLAB meet Amazon S3: setting th...
- XML meets JSON
- MS Access meets H2. Test your Baseball Knowledge
- Amazon S3 meets MS Azure Blob Storage. A match...
- Local vs. remote files. Will blending overcome the dis...
- MS Word meets Web Crawling. Identifying the Secret...
- A Cross-Platform Ensemble Model: R meets Python a...
- Twitter meets PostgreSQL. More than idle chat?
- Hadoop Hive meets Excel. Your flight is boarding now...
- Open Street Maps (OSM) meets CSV Files and Goog...
- IBM Watson meets Google API

Will They Blend? Experiments in Data & Tool Blending. Kindle epub meets image JPEG: Will KNIME make peace between the Capulets and the Montagues?

https://www.knime.org/blog/will-they-blend
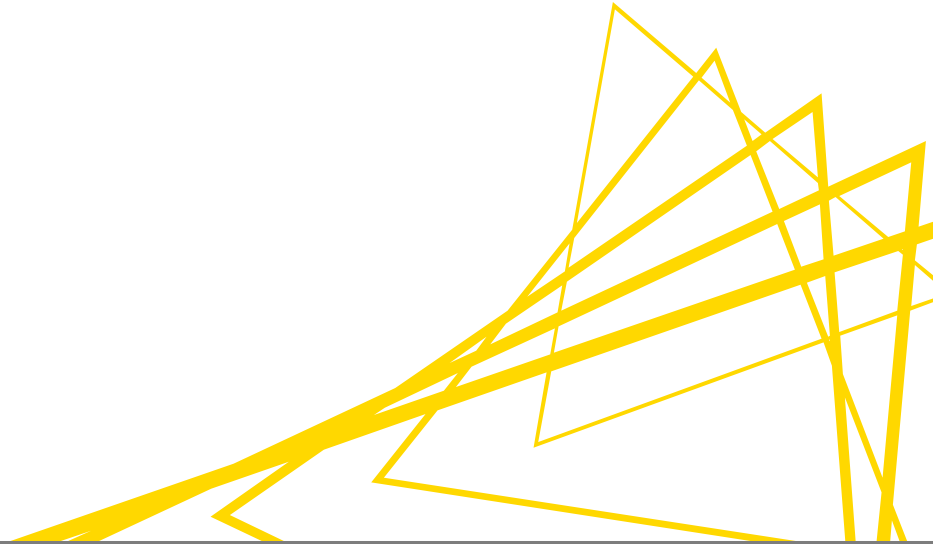
Hot(?) Topic:
Scalability, Big Data, Cloud.

Scalability, Big Data, Cloud

- Lots of Work on our Big Data Extensions
  - New&Cooking: KNIME on Spark, H20 Integration
- Blending with / Connectors to Cloud Resources
- Cloud Deployments: Analytics Platform and Server

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Hot Topics:
Guided Analytics

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How to make Data Science Useable?

- Black Box:
  Limited Applicability (narrow, well-defined tasks)

- Analytical (Workflow) Templates:
  Limited Audience (still requires Data Science!)

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Remember this?

How to make Data Science Useable?

- Black Box:
Limited Applicability (narrow, well-defined tasks)

- Analytical Templates:
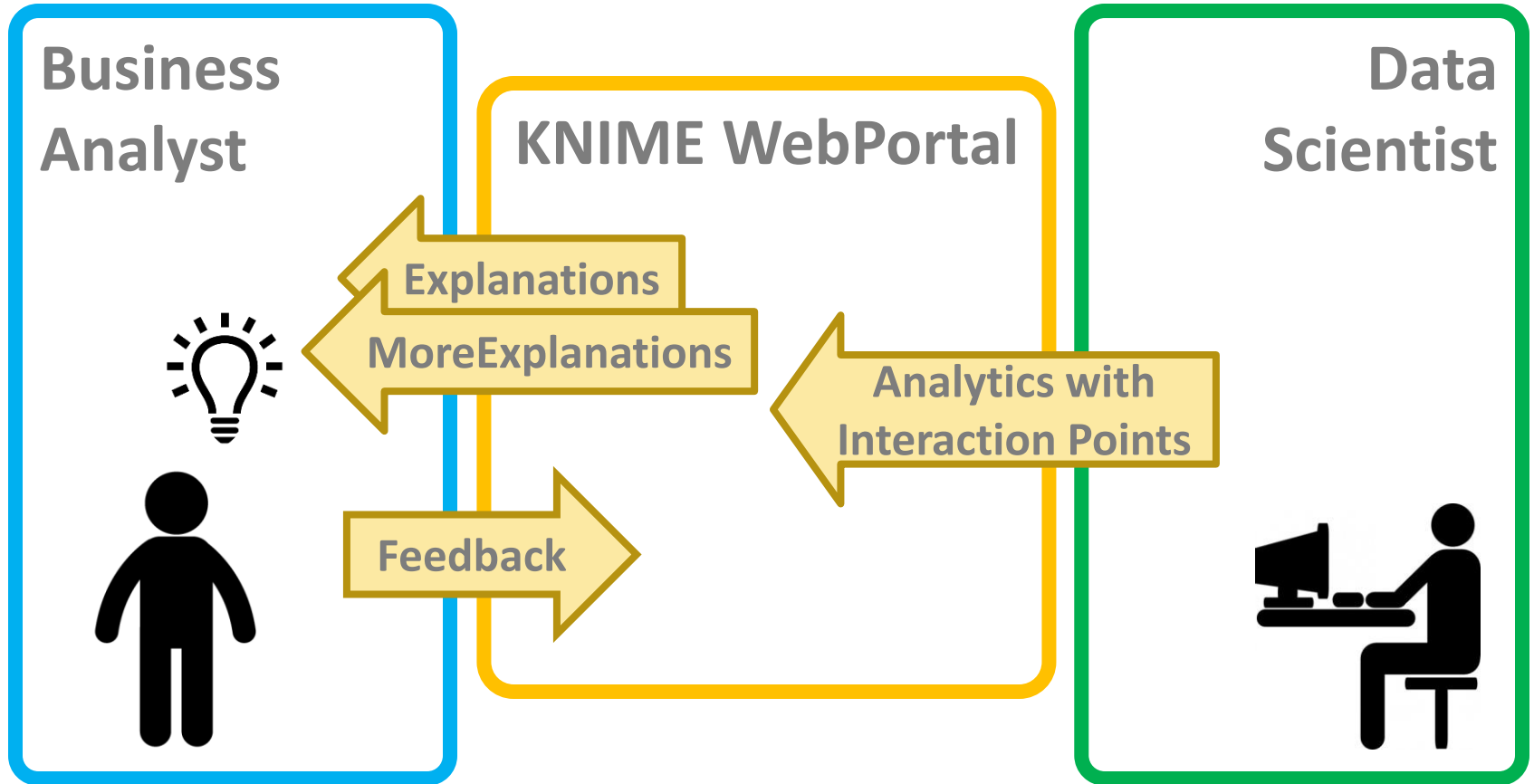Limited Audience (requires Data Science!)

- Guided Analytics =
          Workflows as Analytical Applications
Puts Business Analyst in Driver's Seat
(wearing a Safety Belt!)

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Guided Analytics at the Summit…

- What's New and Cooking Sessions
  - Lots of progress in 2016/17: WebPortal interactivity
- Two "KNIME Use Case" Talks on Thursday
  - Greg Landrum for Life Science
  - Rosaria Silipo for Customer Intelligence

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An Update on 2016...

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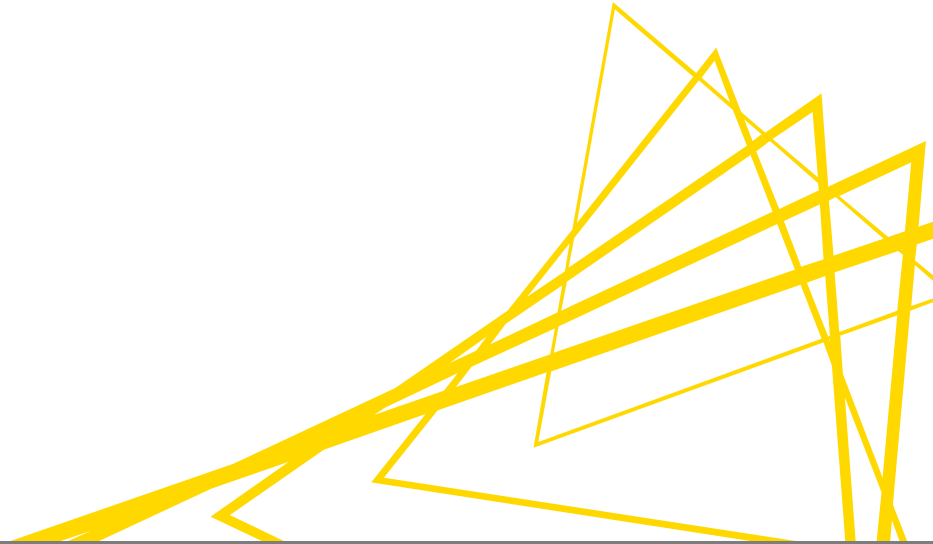
Analyst Updates

TOOL SATISFACTION

Tool satisfaction bar chart:

Tool	Extremely Satisfied	Satisfied	Neutral
KNIME (commercial & free)	69%	24%	
IBM SPSS Modeler	60%	34%	4%
R	57%	38%	
STATISTICA	50%	43%	
Weka	40%	55%	5%
RapidMiner (free version)	32%	59%	9%
SAS Enterprise Miner	29%	63%	8%
SAS	20%	63%	13%
IBM SPSS Statistics	15%	73%	10%

Legend: ● Extremely Satisfied ● Satisfied ● Neutral ● Dissatisfied ● Extremely Dissatisfied
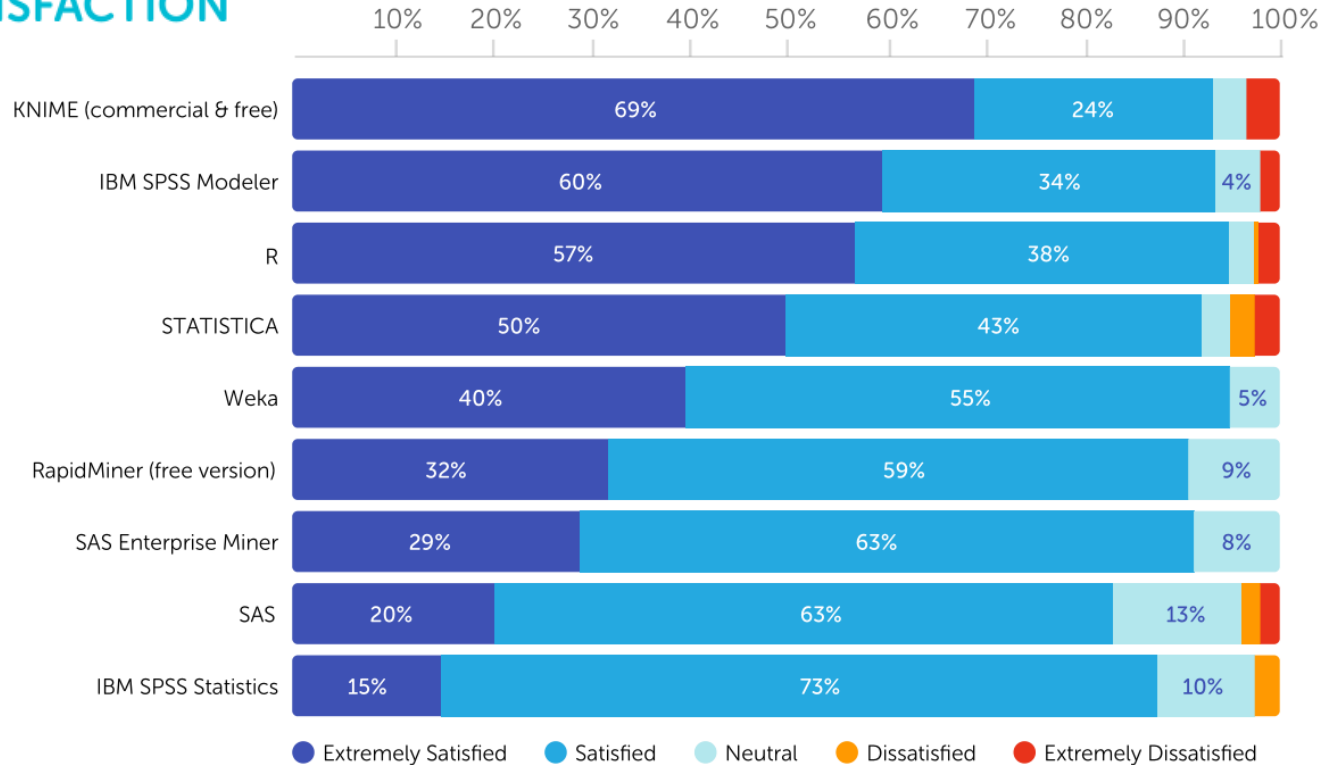
Rexer Analytics Data Science Survey

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New Members

- Katharina Koch
  - Karl-Wilhelm
- Sabrina Reiner
- Arthur von Eschen
- Vincenzo Tursi
- Roland Burger
- Mihály Medzihradszky (Medzi)
- Christian Dietz

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Summit 2017
Changes & Highlights

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New This Year:

- Parallel Tracks on Thursday Morning

- Tech Briefings

- KNIME Case Studies (this year: Guided Analytics)

- and a Panel

During the Breaks: check out the Exhibition Area

Partners:
- Dymatrix
- EPAM (& Infomatix)
- Datatroniq
- Advanced Analytic Services
- GEMMACON
- TIBCO
- Microsoft
- Consist

Partners (cont.)
- Informationsfabrik
- Schrödinger
- Chemaxon / Infocom

and:
- KNIME Demo Station

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Wednesday AM...

9:00am - Registration, Coffee & Snacks

10:00am - Opening and KNIME Session

- Welcome and Introduction
  Michael Berthold (KNIME)
- What's New
  Bernd Wiswedel and Team (KNIME)
- What's Cooking in KNIME Labs
  Bernd Wiswedel and Team (KNIME)

12:30pm - Lunch Break

1:30pm - KNIME Session

- A Peek into KNIME Big Data Labs
  Tobias Kötter and Team (KNIME)

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...Wednesday PM...

2:30pm - Session – KNIME in the Enterprise

○ Deploying KNIME to the Enterprise: Reshaping Data & Architecture for Healthcare
James Lumley (Eli Lilly and Company)

○ Digital factories with CloudFoundry, KNIME, and BOSH
Jan Pospisil (Siemens), Steffen Zuber & Noah Ispas (Anynines)

○ Tech Briefing: Distributed Workflow Executors
Thorsten Meinl (KNIME)

3:45pm - Afternoon Break

4:15pm - Special Session

○ The KNIME Model Factory or "Getting your life back"
Iris Adä & Phil Winters (KNIME)

5:00pm - End of Day 1

6:00pm - Coaches depart to Dinner Location

7:00pm - Flying Dinner at "ewerk"

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Busses leave Hotel at 6pm
Returns starting at 10pm.
Last bus at midnight!

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Thursday AM...

8:00am - Registration, Coffee & Snacks

9:00am - Parallel Track

Parallel Track - Life Sciences	Parallel Track - Connectivity
o Guided Analytics in Action: Patent Analysis from your Browser *Greg Landrum (KNIME)*	o Orchestrating a proprietary endurance qualification system for HV batteries with KNIME *Maximilian Mücke (ACCUmotive) and Jürgen Walter (Datatroniq)*
o Practical applications of Matched Molecular Pairs (MMPs) at Vernalis *Steve Roughley & Richard Sherhod (Vernalis)*	o User experience with KNIME for large industrial data sets and applications *Bernhard Lang (Siemens)*
	o Tech Briefing: Connecting to SAP HANA *Kilian Thiel (KNIME) and Norbert Havas (EPAM)*

10:15am - Coffee Break

...Thursday AM...

Parallel Track - Life Sciences	Parallel Track - Customer Intelligence
○ Image segmentation, single molecule tracking, and data analysis with KNIME and KNIP *Jan Eglinger (Friedrich Miescher Institute for Biomedical Research)*	○ Venice Airport: a small big data story *Fabrizio Montino (Marco Polo Venice Airport) and Dario Cannone (Miriade)*
○ de.NBI - Bioinformatics Integrations for KNIME *Knut Reinert (FU Berlin) and colleagues*	○ Guided Analytics in Action: Customer Segmentation from your Browser *Rosaria Silipo & Vincenzo Tursi (KNIME)*
	○ Tech Briefing: Customized Distance Functions in KNIME *Bernd Wiswedel (KNIME)*

12:00pm - Lunch

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...Thursday PM...

1:00pm - Session – Data and Tool Blending

- Smart Data at BW Bank – Big Data Analytics with Cassandra, Spark and KNIME
  Gerrit Bungeroth (BW Bank) and Stefan Weingaertner (AdvancedAnalytics.Academy)
- Tech Briefing: Instrumenting KNIME with KNIME
  Iris Ada (KNIME)
- Will they Blend: An interactive Session
  Rosaria Silipo (KNIME) and other blender Guests

2:30pm - Afternoon Break

3:00pm - Session – Internet of Things

- Fault Prediction and Failure Detection of drives using real-time signal processing and machine learning tech...
  Jürgen Walter & Stefan Weingaertner (Datatroniq)
- Predictive Next Best Action for Marketing Demand Generation and Sales
  Eric Bower & Josip Lazarevski (Palo Alto Networks)
- Poster Introduction
  Phil Winters (KNIME)

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...Thursday PM

4:15pm - Short Break

4:30pm - Special Session

    ○ My Boss Can't Understand My Unsupervised Learning Models
       Dean Abbott (Abbott Analytics)

5:30pm - Open Bar and Poster Session

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Friday AM Workshops

08:30	Registration, Coffee & Snacks

09:30-11:00	Workshops: Session I

Name of Workshop	Instructors	Room
SeqAn and OpenMS (CIBI/de.nbi) Integration Workshop	Temesgen H. Dadi (Free Uni. Berlin), Julianus Pfeuffer (Eberhard Karls Uni. Tübingen), Alexander Fillbrunn (Uni. Konstanz)	Berlin-Dubai
3D-e-Chem KNIME Nodes for Integrated Structural Cheminformatics Analysis and Computer-Aided Drug Discovery	M. Vass (Vrije Universiteit Amsterdam), S. Verhoeven (Netherlands eScience Center), R. McGuire (Radboudumc, BioAxis Research), C. de Graaf (Vrije Universiteit Amsterdam)	Berlin-Peking
KNIME Model Factory Workshop: Details, Ideas and Interaction	Iris Adä & Phil Winters (KNIME), Dean Abbott (Abbott Analytics)	Berlin-London
KNIME Image Processing	Christian Dietz & Martin Horn (KNIME)	Berlin-Berlin 1
KNIME Big Data	Tobias Kötter & Björn Lohrmann (KNIME)	Berlin-Berlin 3

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Friday AM Workshops

11:00-11:30	**Coffee Break**

11:30-13:00	**Workshops: Session II**

Name of Workshop	Instructors	Room
Helping Your Boss Leverage Advanced Analytics (& KNIME)	Phil Winters & Greg Landrum (KNIME)	Berlin-Dubai
KNIME Text Mining	Kilian Thiel & Roland Burger (KNIME)	Berlin-Peking
KNIME Server	Jon Fuller & Iris Adä (KNIME)	Berlin-London
Data Preparation from the Trenches	Dean Abbott (Abbott Analytics)	Berlin-Berlin 1
IoT Analytics with KNIME	Stefan Weingaertner (Datatroniq)	Berlin-Berlin 3

13:00-14:00	**Lunch and end of KNIME Spring Summit**	Lunch Boxes available!

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Up Next?

2017 Fall Summit
November 1-3, 2017. Austin, Texas.

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And now back to the Summit...

...have Fun!

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