

```

{
  "query_concepts": [
    {
      "id": "/graphs/wikipedia/en-20120601/concepts/Data_analysis",
      "label": "Data analysis"
    }
  ],
  "results": [
    {
      "explanation_tags": [
        {
          "concept": {
            "id": "/graphs/wikipedia/en-20120601/concepts/Data_analysis",
            "label": "Data analysis"
          },
          "score": 0.9989873,
          "parts_index": 1,
          "text_index": [
            106,
            114
          ],
          "passage": "...a Formula 1 race, a car sends hundreds of millions of data points to its garage for real-time analysis and feedback. So why not use this detailed and rigorous data system elsewhere, like ... at..."
        },
        {
          "concept": {
            "id": "/graphs/wikipedia/en-20120601/concepts/Data",
            "label": "Data"
          },
          "score": 0.992933,
          "parts_index": 0,
          "text_index": [
            1085,
            1089
          ],
          "passage": "...120 sensors when it goes into a race. It's measuring all sorts of things around the car. That data is logged. We're logging about 500 different parameters within the data systems, about 13,000..."
        },
        {
          "concept": {
            "id": "/graphs/wikipedia/en-20120601/concepts/Information",
            "label": "Information"
          },
          "score": 0.9899196,
          "parts_index": 0,
          "text_index": [
            2373,
            2384
          ],
          "passage": "...unpredictable event. This was a heart attack that no one could see coming. But when we look at the information there, we can see that things are starting to become a little fuzzy about five minutes or so..."
        },
        {
          "concept": {
            "id": "/graphs/wikipedia/en-20120601/concepts/Telemetry",
            "label": "Telemetry"
          },
          "score": 0.9769686,
          "parts_index": 0,
          "text_index": [
            1325,
            1334
          ],
          "passage": "...are not working the way they should do, and we're sending that data

```

back to the garage using telemetry at a rate of two to four megabits per second. So during a two-hour race, each car will be sending..."

```

},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Parameter",
    "label": "Parameter"
  },
  "score": 0.95544666,
  "parts_index": 0,
  "text_index": [
    1135,
    1145
  ],
  "passage": "...all sorts of things around the car. That data is logged. We're logging about 500 different parameters within the data systems, about 13,000 health parameters and events to say when things are not..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Wireless_network",
    "label": "Wireless network"
  },
  "score": 0.9506246,
  "parts_index": 0,
  "text_index": [
    6282,
    6303
  ],
  "passage": "...there's no reason why it should stay within a hospital. It can go beyond the walls. With wireless connectivity these days, there is no reason why patients, doctors and nurses always have to be in the same..."
}
],
"id": "/corpora/public/TEDTalks/documents/1802",
"label": "Peter van Manen: How can Formula 1 racing help ... babies?",
"score": 0.9618721,
"user_fields": {
  "description": "During a Formula 1 race, a car sends hundreds of millions of data points to its garage for real-time analysis and feedback. So why not use this detailed and rigorous data system elsewhere, like ... at children's hospitals? Peter van Manen tells us more. (Filmed at TEDxNijmegen.)",
  "speaker": "Peter van Manen",
  "thumbnail": "
https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/02f48c708b9fd49b9b05320ecfec5dd260b0c7a7\_1600x1200.jpg?quality=89&w=600",
  "title": "How can Formula 1 racing help ... babies?",
  "url": "http://www.ted.com/talks/peter_van_manen_how_can_formula_1_racing_help_babies"
},
"last_modified": "2015-09-01T16:53:55.472Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/CERN",
        "label": "CERN"
      },
      "score": 0.99494696,
      "parts_index": 0,
      "text_index": [
        331,
        335
      ],
      "passage": "...of Independence, but as the day of the discovery of the Higgs boson. Well, at least, here at CERN.\n\nBut for me, the biggest surprise of that day was that there was no big surprise. In the eye of a..."
    }
  ]
}

```

```

},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Data",
    "label": "Data"
  },
  "score": 0.992933,
  "parts_index": 0,
  "text_index": [
    9625,
    9629
  ],
  "passage": "...know the end of the story. This is science in progress, and to solve the mystery, we need more data, and hopefully, the LHC will soon add new clues to this story. Just one number, the Higgs boson..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Particle_physics",
    "label": "Particle physics"
  },
  "score": 0.9919275,
  "parts_index": 0,
  "text_index": [
    6166,
    6182
  ],
  "passage": "...familiar units, because it's equal to something like 10 to the minus 22 grams, but it is large in particle physics units, because it is equal to the weight of an entire molecule of a DNA constituent.\n\nSo armed..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Information",
    "label": "Information"
  },
  "score": 0.9899196,
  "parts_index": 0,
  "text_index": [
    6288,
    6299
  ],
  "passage": "...because it is equal to the weight of an entire molecule of a DNA constituent.\n\nSo armed with this information from the LHC, together with some colleagues here at CERN, we computed the probability that our..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Measurement",
    "label": "Measurement"
  },
  "score": 0.98491794,
  "parts_index": 0,
  "text_index": [
    10236,
    10247
  ],
  "passage": "...the multiverse.\n\nBut I don't know if my hypothesis is right. That's how physics works: A single measurement can put us on the road to a new understanding of the universe or it can send us down a blind..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Large_Hadron_Collider",
    "label": "Large Hadron Collider"
  },
  "score": 0.9749915,

```

```

    "parts_index": 0,
    "text_index": [
        56,
        77
    ],
    "passage": "...last year, on the Fourth of July, experiments at the Large Hadron Collider discovered the Higgs boson. It was a historical day. There's no doubt that from now on, the Fourth..."
  }
],
"id": "/corpora/public/TEDTalks/documents/1853",
"label": "Gian Giudice: Why our universe might exist on a knife-edge",
"score": 0.92680055,
"user_fields": {
  "description": "The biggest surprise of discovering the Higgs boson? That there were no surprises. Gian Giudice talks us through a problem in theoretical physics: what if the Higgs field exists in an ultra-dense state that could mean the collapse of all atomic matter? With wit and charm, Giudice outlines a grim fate -- and why we shouldn't start worrying just yet.",
  "speaker": "Gian Giudice",
  "thumbnail": "
https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/e2059cd7fbd3f541bc6c7abdb611425f036fcb97\_1600x1200.jpg?quality=89&w=600",
  "title": "Why our universe might exist on a knife-edge",
  "url": "
http://www.ted.com/talks/gian\_giudice\_why\_our\_universe\_might\_exist\_on\_a\_knife\_edge"
},
"last_modified": "2015-09-01T16:54:31.583Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Data_analysis",
        "label": "Data analysis"
      },
      "score": 0.9989873,
      "parts_index": 1,
      "text_index": [
        110,
        122
      ],
      "passage": "...have access to a wealth of data and statistics reflecting every part of urban life. But as data analyst Ben Wellington suggests in this entertaining talk, sometimes they just don't know what to do..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Counting",
        "label": "Counting"
      },
      "score": 0.9969651,
      "parts_index": 0,
      "text_index": [
        1772,
        1780
      ],
      "passage": "...data portal, and it's pretty awesome. So you go and look at data like this, and instead of just counting\nthe number of cabs, we can start to ask different questions.\n\nSo I had a question. When's rush..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Data",
        "label": "Data"
      },
      "score": 0.992933,

```

```

    "parts_index": 0,
    "text_index": [
        1011,
        1015
    ],
    "passage": "...want want to know. Here's a number \nthat our citizens want to know. So they go back to their raw data, they count, they add, they calculate, and then they put out reports, and those reports\nwill have..."
},
{
    "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Information",
        "label": "Information"
    },
    "score": 0.9899196,
    "parts_index": 0,
    "text_index": [
        12537,
        12548
    ],
    "passage": "...could follow, and we're not that far off from a time\nwhere you could write one program and map information from 100 countries. It's not science fiction.\nWe're actually quite close.\n\nAnd by the way, who are..."
},
{
    "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Statistics",
        "label": "Statistics"
    },
    "score": 0.98891723,
    "parts_index": 0,
    "text_index": [
        240,
        250
    ],
    "passage": "...Island.\n\nThese are the numbers that make up\nthe infrastructure of New York City. These are the statistics\nof our infrastructure. They're the kind of numbers you can find\nreleased in reports by city..."
},
{
    "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Comma-separated_values",
        "label": "Comma-separated values"
    },
    "score": 0.98093504,
    "parts_index": 0,
    "text_index": [
        8952,
        8955
    ],
    "passage": "...you live, and that number is growing,\nand that's great. You can download data in any format,\nbe it CSV or PDF or Excel document. Whatever you want,\nyou can download the data that way. The problem is,..."
}
},
{
    "id": "/corpora/public/TEDTalks/documents/2199",
    "label": "Ben Wellington: How we found the worst place to park in New York City -- using big data",
    "score": 0.9246337,
    "user_fields": {
        "description": "City agencies have access to a wealth of data and statistics reflecting every part of urban life. But as data analyst Ben Wellington suggests in this entertaining talk, sometimes they just don't know what to do with it. He shows how a combination of unexpected questions and smart data crunching can produce strangely useful insights, and shares tips on how to release large sets of data so that anyone can use them.",
        "speaker": "Ben Wellington",

```

```

    "thumbnail": "
    https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/3aa7d5d06bdf47e51
    9b4a154435ca6dd61616570_2880x1620.jpg?quality=89&w=600",
    "title": "How we found the worst place to park in New York City -- using big data",
    "url": "
    http://www.ted.com/talks/ben_wellington_how_we_found_the_worst_place_to_park_in_new_yo
    rk_city_using_big_data"
  },
  "last_modified": "2015-09-01T17:05:16.015Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Data_mining",
        "label": "Data mining"
      },
      "score": 0.9979757,
      "parts_index": 0,
      "text_index": [
        8298,
        8307
      ],
      "passage": "...with various technologies.\n\nAs appealing as it might sound, you
      cannot algorithmically data mine your way to the answer. There is no \"Find
      Terrorist\" button, and the more data we integrate from a..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Data",
        "label": "Data"
      },
      "score": 0.992933,
      "parts_index": 0,
      "text_index": [
        6393,
        6397
      ],
      "passage": "...human condition. The major emphasis of most approaches to big data
      focus on, \"How do I store this data? How do I search this data? How do I process
      this data?\" These are necessary but insufficient..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Information",
        "label": "Information"
      },
      "score": 0.9899196,
      "parts_index": 0,
      "text_index": [
        12876,
        12887
      ],
      "passage": "...for relocation based on priority need. The computer had to
      integrate a vast amount of geospatial information, social media data and relief
      organization information to answer this question. By implementing a..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Statistics",
        "label": "Statistics"
      },
      "score": 0.98891723,
      "parts_index": 0,
      "text_index": [
        10869,
        10879
      ]
    }
  ]
}

```

```

    ],
    "passage": "...were from Libya, 50 percent of those from a single town in Libya,
    hugely important since prior statistics put that figure at three percent. It also
    helped to hone in on a figure of rising importance in al..."
  },
  {
    "concept": {
      "id": "/graphs/wikipedia/en-20120601/concepts/Research",
      "label": "Research"
    },
    "score": 0.9869155,
    "parts_index": 0,
    "text_index": [
      10591,
      10602
    ],
    "passage": "...for meaningful results in an operational time frame using humans,
    PDFs and tenacity alone. The researchers had to lever up their human minds with
    technology to dive deeper, to explore non-obvious..."
  },
  {
    "concept": {
      "id": "/graphs/wikipedia/en-20120601/concepts/Big_data",
      "label": "Big data"
    },
    "score": 0.9859162,
    "parts_index": 0,
    "text_index": [
      1473,
      1481
    ],
    "passage": "...it. It's become the dominant school of thought in computer science.
    But as we enter the era of big data, of network systems, of open platforms, and
    embedded technology, I'd like to suggest it's time to..."
  }
],
"id": "/corpora/public/TEDTalks/documents/1556",
"label": "Shyam Sankar: The rise of human-computer cooperation",
"score": 0.92221886,
"user_fields": {
  "description": "Brute computing force alone can't solve the world's problems. Data
  mining innovator Shyam Sankar explains why solving big problems (like catching
  terrorists or identifying huge hidden trends) is not a question of finding the right
  algorithm, but rather the right symbiotic relationship between computation and human
  creativity.",
  "speaker": "Shyam Sankar",
  "thumbnail": "
https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/5c4684ef473da7cf988f4f4c6da8b23ec09e6b87\_1600x1200.jpg?quality=89&w=600",
  "title": "The rise of human-computer cooperation",
  "url": "http://www.ted.com/talks/shyam_sankar_the_rise_of_human_computer_cooperation"
},
"last_modified": "2015-09-01T16:44:52.236Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Machine_learning",
        "label": "Machine learning"
      },
      "score": 0.99393946,
      "parts_index": 0,
      "text_index": [
        2713,
        2729
      ],
    },
  ],

```

```

"passage": "...of 100,000 people or more. So to understand this, let's look at one
of those classes, the Machine Learning class offered by my colleague and cofounder
Andrew Ng. Andrew teaches one of the bigger Stanford..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Data",
    "label": "Data"
  },
  "score": 0.992933,
  "parts_index": 0,
  "text_index": [
    14600,
    14604
  ],
  "passage": "...of giving us a completely unprecedented look into understanding
human learning. Because the data that we can collect here is unique. You can
collect every click, every homework submission, every..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Research",
    "label": "Research"
  },
  "score": 0.9869155,
  "parts_index": 0,
  "text_index": [
    16455,
    16465
  ],
  "passage": "...as well, because it provides us with the potential of solving a
30-year-old problem. Educational researcher Benjamin Bloom, in 1984, posed what's
called the 2 sigma problem, which he observed by studying..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Reproducibility",
    "label": "Reproducibility"
  },
  "score": 0.9799419,
  "parts_index": 0,
  "text_index": [
    11665,
    11677
  ],
  "passage": "...this one by Saddler and Good, that peer grading is a surprisingly
effective strategy for providing reproducible grades. It was tried only in small
classes, but there it showed, for example, that these..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Probability_distribution",
    "label": "Probability distribution"
  },
  "score": 0.9789497,
  "parts_index": 0,
  "text_index": [
    15308,
    15320
  ],
  "passage": "...fix them?\n\nSo here's an example of that, also from Andrew's
Machine Learning class. This is a distribution of wrong answers to one of Andrew's
assignments. The answers happen to be pairs of numbers, so you..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Test_preparation",

```



```

    "label": "Test preparation"
  },
  "score": 0.9730185,
  "parts_index": 0,
  "text_index": [
    9706,
    9724
  ],
  "passage": "...retrieval questions are not the end of the story. One needs to
build in much more meaningful practice questions, and one also needs to provide
the students with feedback on those questions. Now, how do you..."
}
],
"id": "/corpora/public/TEDTalks/documents/1531",
"label": "Daphne Koller: What we're learning from online education",
"score": 0.9204118,
"user_fields": {
  "description": "Daphne Koller is enticing top universities to put their most
intriguing courses online for free -- not just as a service, but as a way to
research how people learn. With Coursera (cofounded by Andrew Ng), each keystroke,
quiz, peer-to-peer discussion and self-graded assignment builds an unprecedented
pool of data on how knowledge is processed. ",
  "speaker": "Daphne Koller",
  "thumbnail":
    "https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/a512e584f64e2a30
945af3c91101253c92a874fa_1600x1200.jpg?quality=89&w=600",
  "title": "What we're learning from online education",
  "url":
    "http://www.ted.com/talks/daphne_koller_what_we_re_learning_from_online_education"
},
"last_modified": "2015-09-01T16:44:03.364Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Machine_learning",
        "label": "Machine learning"
      },
      "score": 0.99393946,
      "parts_index": 0,
      "text_index": [
        7065,
        7081
      ],
      "passage": "...And to do that, I'm going to tell you about a framework which is
very popular in statistics and machine learning of the last 50 years called
Bayesian decision theory. And it's more recently a unifying way to..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Data",
        "label": "Data"
      },
      "score": 0.992933,
      "parts_index": 0,
      "text_index": [
        7880,
        7884
      ],
      "passage": "...inference is you have two sources of information from which to make
your inference. You have data, and data in neuroscience is sensory input. So I
have sensory input, which I can take in to make..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Information",

```

```

    "label": "Information"
  },
  "score": 0.9899196,
  "parts_index": 0,
  "text_index": [
    7824,
    7835
  ],
  "passage": "...the gray levels of uncertainty. And the key idea to Bayesian inference is you have two sources of information from which to make your inference. You have data, and data in neuroscience is sensory input. So I..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Statistics",
    "label": "Statistics"
  },
  "score": 0.98891723,
  "parts_index": 0,
  "text_index": [
    7050,
    7060
  ],
  "passage": "...and variability. And to do that, I'm going to tell you about a framework which is very popular in statistics and machine learning of the last 50 years called Bayesian decision theory. And it's more recently..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Prediction",
    "label": "Prediction"
  },
  "score": 0.9720336,
  "parts_index": 0,
  "text_index": [
    10521,
    10532
  ],
  "passage": "...probability of different sensory feedbacks given my beliefs. So that really means I have to make predictions of the future. And I want to convince you the brain does make predictions of the sensory feedback..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Hypothesis",
    "label": "Hypothesis"
  },
  "score": 0.9661455,
  "parts_index": 0,
  "text_index": [
    15335,
    15346
  ],
  "passage": "...it was important how I could explain how they were telling inconsistent truths. And we hypothesize based on the tickling study that when one child hits another, they generate the movement command...."
}
},
{id": "/corpora/public/TEDTalks/documents/1261",
"label": "Daniel Wolpert: The real reason for brains",
"score": 0.9173087,
"user_fields": {
  "description": "Neuroscientist Daniel Wolpert starts from a surprising premise: the brain evolved, not to think or feel, but to control movement. In this entertaining, data-rich talk he gives us a glimpse into how the brain creates the grace and agility of human motion.",
  "speaker": "Daniel Wolpert",

```

```

    "thumbnail":
    "https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/794a93b76d7c657c
2eb52e229c4b20e583615e06_1600x1200.jpg?quality=89&w=600",
    "title": "The real reason for brains",
    "url": "http://www.ted.com/talks/daniel_wolpert_the_real_reason_for_brains"
  },
  "last_modified": "2015-09-01T16:35:45.266Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Data_analysis",
        "label": "Data analysis"
      },
      "score": 0.9989873,
      "parts_index": 1,
      "text_index": [
        84,
        107
      ],
      "passage": "...mathematician Peter Donnelly reveals the common mistakes humans
make in interpreting statistics -- and the devastating impact these errors can
have on the outcome of criminal..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Information",
        "label": "Information"
      },
      "score": 0.9899196,
      "parts_index": 0,
      "text_index": [
        9913,
        9924
      ],
      "passage": "...in the conference specifically about that. But it turns out that
unlocking the secrets in the information generated by modern experimental
technologies, a key part of that has to do with fairly..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Statistics",
        "label": "Statistics"
      },
      "score": 0.98891723,
      "parts_index": 0,
      "text_index": [
        488,
        498
      ],
      "passage": "...nation-states in the modern global economy. My brief, as you've
just heard, is to tell you about statistics -- and, to be more precise, to tell
you some exciting things about statistics. And that's --..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Research",
        "label": "Research"
      },
      "score": 0.9869155,
      "parts_index": 0,
      "text_index": [
        16110,
        16118
      ],
      "passage": "...wrong, in two different ways.\n\nSo where did he get the one in 73

```

million number? He looked at some research, which said the chance of one cot death in a family like Sally Clark's is about one in 8,500. So..."

```

},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Independence_(probability_theory)",
    "label": "Independence (probability theory)"
  },
  "score": 0.9779587,
  "parts_index": 0,
  "text_index": [
    16763,
    16774
  ],
  "passage": "...-- times a half -- the chance a second time. So he said, \"Here, I'll assume that these events are independent. When you multiply 8,500 together twice, you get about 73 million.\" And none of this was stated to..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Likelihood_function",
    "label": "Likelihood function"
  },
  "score": 0.9690849,
  "parts_index": 0,
  "text_index": [
    14155,
    14165
  ],
  "passage": "...What we have to do, once we know the test is positive, is to weigh up the plausibility, or the likelihood, of two competing explanations. Each of those explanations has a likely bit and an unlikely bit...."
}
],
"id": "/corpora/public/TEDTalks/documents/67",
"label": "Peter Donnelly: How juries are fooled by statistics",
"score": 0.9127554,
"user_fields": {
  "description": "Oxford mathematician Peter Donnelly reveals the common mistakes humans make in interpreting statistics -- and the devastating impact these errors can have on the outcome of criminal trials.",
  "speaker": "Peter Donnelly",
  "thumbnail": "
https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/159\_480x360.jpg?quality=89&w=600",
  "title": "How juries are fooled by statistics",
  "url": "http://www.ted.com/talks/peter_donnelly_shows_how_stats_fool_juries"
},
"last_modified": "2015-09-01T16:06:33.693Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Machine_learning",
        "label": "Machine learning"
      },
      "score": 0.99393946,
      "parts_index": 0,
      "text_index": [
        11776,
        11792
      ],
      "passage": "...activating neurons with light. A second big idea is that this is the era of big data\nand machine learning, and machine learning promises\nto revolutionize our understanding of everything from social..."
    }
  ],

```

```

{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Data",
    "label": "Data"
  },
  "score": 0.992933,
  "parts_index": 0,
  "text_index": [
    1178,
    1182
  ],
  "passage": "...their ability\nto draw rich, abstract inferences rapidly and accurately\nfrom sparse, noisy data. I'm going to give you\njust two examples today. One is about a problem of generalization, and the..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Laboratory",
    "label": "Laboratory"
  },
  "score": 0.99092305,
  "parts_index": 0,
  "text_index": [
    10850,
    10860
  ],
  "passage": "...strategies for acting in the world: asking for help and exploring. I've just shown you\ntwo laboratory experiments out of literally hundreds in the field\nthat make similar points, because the really..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Statistics",
    "label": "Statistics"
  },
  "score": 0.98891723,
  "parts_index": 0,
  "text_index": [
    8098,
    8109
  ],
  "passage": "...with the toy. So in this next experiment, we're going to give babies\njust a tiny bit of statistical data supporting one hypothesis over the other, and we're going to see if babies\ncan use that to..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Research",
    "label": "Research"
  },
  "score": 0.9869155,
  "parts_index": 0,
  "text_index": [
    13113,
    13121
  ],
  "passage": "...learn\nfrom small amounts of data. Human minds think\nof altogether new ideas. Human minds generate\nresearch and discovery, and human minds generate\nart and literature and poetry and theater, and human minds..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Big_data",
    "label": "Big data"
  },
  "score": 0.9859162,
  "parts_index": 0,

```

```

    "text_index": [
      11763,
      11771
    ],
    "passage": "...brains transparent, activating neurons with light. A second big
idea is that this is the era of big data\nand machine learning, and machine
learning promises\nto revolutionize our understanding of..."
  }
},
"id": "/corpora/public/TEDTalks/documents/2265",
"label": "Laura Schulz: The surprisingly logical minds of babies",
"score": 0.9105808,
"user_fields": {
  "description": "How do babies learn so much from so little so quickly? In a fun,
experiment-filled talk, cognitive scientist Laura Schulz shows how our young ones
make decisions with a surprisingly strong sense of logic, well before they can talk.",
  "speaker": "Laura Schulz",
  "thumbnail": "
https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/b6187cbb01f39c3a29428434b9194fe217041452\_2880x1620.jpg?quality=89&w=600",
  "title": "The surprisingly logical minds of babies",
  "url": "
http://www.ted.com/talks/laura\_schulz\_the\_surprisingly\_logical\_minds\_of\_babies"
},
"last_modified": "2015-09-01T17:08:08.682Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Machine_learning",
        "label": "Machine learning"
      },
      "score": 0.99393946,
      "parts_index": 0,
      "text_index": [
        2734,
        2750
      ],
      "passage": "...and students to teach computers to see. Our research field is
called\ncomputer vision and machine learning. It's part of the general field\nof
artificial intelligence. So ultimately, we want to teach\nthe..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Data",
        "label": "Data"
      },
      "score": 0.992933,
      "parts_index": 0,
      "text_index": [
        4698,
        4702
      ],
      "passage": "...solely\non better and better algorithms, my insight was to give the
algorithms\nthe kind of training data that a child was given through experiences
in both quantity and quality.\n\nOnce we know this, we..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Information",
        "label": "Information"
      },
      "score": 0.9899196,
      "parts_index": 0,
      "text_index": [
        6948,

```

```

6959
],
"passage": "...brain, we're ready to come back\nto the algorithms themselves. As
it turned out, the wealth\nof information provided by ImageNet was a perfect match
to a particular class\nof machine learning algorithms..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Data_set",
    "label": "Data set"
  },
  "score": 0.9879159,
  "parts_index": 0,
  "text_index": [
    4827,
    4835
  ],
  "passage": "...experiences in both quantity and quality.\n\nOnce we know this, we
knew we needed to collect a data set that has far more images\nthan we have ever
had before, perhaps thousands of times more, and..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Research",
    "label": "Research"
  },
  "score": 0.9869155,
  "parts_index": 0,
  "text_index": [
    747,
    755
  ],
  "passage": "...at this task. So I'm here today\nto give you a progress report on
the latest advances\nin our research in computer vision, one of the most
frontier\nand potentially revolutionary technologies in..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Big_data",
    "label": "Big data"
  },
  "score": 0.9859162,
  "parts_index": 0,
  "text_index": [
    5746,
    5754
  ],
  "passage": "...a child's mind takes in\nin the early developmental years.\n\nIn
hindsight, this idea of using big data to train computer algorithms\nmay seem
obvious now, but back in 2007, it was not so obvious. We..."
}
],
"id": "/corpora/public/TEDTalks/documents/2218",
"label": "Fei-Fei Li: How we're teaching computers to understand pictures",
"score": 0.9076952,
"user_fields": {
  "description": "When a very young child looks at a picture, she can identify simple
elements: \"cat,\" \"book,\" \"chair.\" Now, computers are getting smart enough to
do that too. What's next? In a thrilling talk, computer vision expert Fei-Fei Li
describes the state of the art -- including the database of 15 million photos her
team built to \"teach\" a computer to understand pictures -- and the key insights
yet to come.",
  "speaker": "Fei-Fei Li",
  "thumbnail": "
https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/fbada01990f86f5af
a850ccc23a0259fec091f929\_2880x1620.jpg?quality=89&w=600",
  "title": "How we're teaching computers to understand pictures",

```

```

    "url": "
    http://www.ted.com/talks/fei_fei_li_how_we_re_teaching_computers_to_understand_picture
    s"
  },
  "last_modified": "2015-09-01T17:06:04.508Z"
},
{
  "explanation_tags": [
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Particle_detector",
        "label": "Particle detector"
      },
      "score": 0.9959555,
      "parts_index": 0,
      "text_index": [
        3273,
        3282
      ],
      "passage": "...of pure energy. This energy is immediately converted into a spray
of subatomic particles, with detectors and computers used to figure out their
properties. This enormous machine -- the large Hadron..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/CERN",
        "label": "CERN"
      },
      "score": 0.99494696,
      "parts_index": 0,
      "text_index": [
        3388,
        3392
      ],
      "passage": "...used to figure out their properties. This enormous machine -- the
large Hadron Collider at CERN in Geneva -- has a circumference of 17 miles and,
when it's operating, draws five times as much..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Particle_physics",
        "label": "Particle physics"
      },
      "score": 0.9919275,
      "parts_index": 0,
      "text_index": [
        155,
        171
      ],
      "passage": "...Actually, for the next 18 minutes I'm going to do the best I can to
describe the beauty of particle physics without equations. It turns out there's a
lot we can learn from coral. Coral is a very beautiful..."
    },
    {
      "concept": {
        "id": "/graphs/wikipedia/en-20120601/concepts/Research",
        "label": "Research"
      },
      "score": 0.9869155,
      "parts_index": 0,
      "text_index": [
        16500,
        16508
      ],
      "passage": "...companies. As with any large investment, it can be emotionally
difficult to abandon a line of research when it isn't working out. But in science,
if something isn't working, you have to toss it out and..."
    }
  ]
}

```



```

},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Mean",
    "label": "Mean"
  },
  "score": 0.9759795,
  "parts_index": 0,
  "text_index": [
    18613,
    18617
  ],
  "passage": "...its heart -- that the smallest things that there are, are somehow an E8 object of possibility? I mean, is there a scale to it, at the smallest scale, or ...?\n\nGL: Well, right now the pattern I showed..."
},
{
  "concept": {
    "id": "/graphs/wikipedia/en-20120601/concepts/Large_Hadron_Collider",
    "label": "Large Hadron Collider"
  },
  "score": 0.9749915,
  "parts_index": 0,
  "text_index": [
    5922,
    5943
  ],
  "passage": "...is the Higgs particle, which gives masses to all these other particles. The main purpose of the Large Hadron Collider is to see this Higgs particle, and we're almost certain it will. But the greatest mystery is what..."
}
],
"id": "/corpora/public/TEDTalks/documents/371",
"label": "Garrett Lisi: An 8-dimensional model of the universe",
"score": 0.90715814,
"user_fields": {
  "description": "Physicist and surfer Garrett Lisi presents a controversial new model of the universe that -- just maybe -- answers all the big questions. If nothing else, it's the most beautiful 8-dimensional model of elementary particles and forces you've ever seen.",
  "speaker": "Garrett Lisi",
  "thumbnail": "https://tedcdnpi-a.akamaihd.net/r/tedcdnpe-a.akamaihd.net/images/ted/56101_480x360.jpg?quality=89&w=600",
  "title": "An 8-dimensional model of the universe",
  "url": "http://www.ted.com/talks/garrett_lisi_on_his_theory_of_everything"
},
"last_modified": "2015-09-01T16:12:38.156Z"
}
]
}

```