Data scientist take an enormous mass of messy data points (unstructured and structured) and use math, statistics and programming to clean, massage and organize them. Then they apply analytic expertise (such as, e.g., industry knowledge, contextual understanding, skepticism of existing assumptions) to uncover hidden solutions to business challenges. This process of uncovering hidden patterns visualized as plots, takes a tremendous amount of programming, that is often quite repetitive and tedious. As a result, companies need to hire highly paid, in short supply, data scientists who will need to spend a lot of time performing these tedious tasks.

**Invention Summary:**

Researchers from the Computer Science department of Rutgers University have developed a technology solution referred to as “Boundless Analytics” that addresses this situation. Boundless Analytics replaces the need for a data scientist to perform complex programming and tedious/repetitive user-designed plot generation.

The solution continuously, and automatically creates new plots pre-generated on any dataset, enabling the process of data exploration to be reduced to search over the pre-generated plot repository. Human authored plots can be also be added to the repository.

**Advantages:**

- Reduces data science to search
- Lowers the cost of “data science” - same number of data scientists do more work and are more effective.
- Opens data science to non-programmers

**Markets & Uses & Verticals**

For use in industries, from retail to government to biotech especially ones where there is a lot of data that requires analysis by data scientists.

**About the Inventor, Tomasz Imieliński**

Dr. Imieliński is a Professor of Computer Science at Rutgers University. He is the author of a joint paper with Agrawal and Swami, entitled 'Mining Association Rules Between Sets of Items in Large Databases’ that initiated the association rule mining research area and is one of the most cited publications (has over 18,000 citations) in computer science. From 1996 until 2003 Dr. Imieliński served as chairman of Computer Science Department.
at Rutgers Was a co-founder of Connotate Technologies –and has also held multiple senior level positions at Ask.com and IAC/Pronto.

**Intellectual Property & Development Status:**

The technology is patent pending and is available for licensing and/or research collaboration

**Inventors**

**Tomasz Imieliński, PhD**

Dr. Imieliński is a Professor of Computer Science at Rutgers University. He is the author of a joint paper with Agrawal and Swami, entitled 'Mining Association Rules Between Sets of Items in Large Databases’ that initiated the association rule mining research area and is one of the most cited publications (has over 18,000 citations) in computer science. From 1996 until 2003 Dr. Imieliński served as chairman of Computer Science Department at Rutgers Was a co-founder of Connote Technologies –and has also held multiple senior level positions at Ask.com and IAC/Pronto.