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CARL PARTNERS WITH MICROSOFT ON MACHINE LEARNING CASE STUDY

Carl data scientists co-publish with Microsoft about FlowWorks sensor anomaly detection.

January 04, 2017 -Vancouver, British Columbia - Carl Data Solutions Inc. (CSE:CRL, CSE:CRL.CN, FSE:7C5, OTC:CDTAF) (“Carl” or the “Company”), a developer of Big-Data-as-a-Service (“BDaaS”)-based solutions for data integration, business intelligence, and the Industrial Internet-of-Things (“IIoT”) applications, is pleased to announce that their data scientists have co-published a case study with software and business partner Microsoft. *Regulating Sensor Error in Wastewater Management Systems with Machine Learning*, discusses water sensor anomaly detection through the Company’s FlowWorks application. The detection of sensor error is a primary concern as more industries and depend on their IIoT for business intelligence, and can save an enterprise thousands of dollars on a monthly basis.

As the field of IIoT matures from data aggregation to predictive intelligence, it becomes increasingly critical to be able to detect sensor errors. Previously, consulting engineers had to manually sift through all the sensor data and modify values believed to be caused by sensor error. Microsoft partnered with the Company to help investigate how to build an anomaly detection model to save water and wastewater management companies money by reducing their operational spending on staff. This case study is important for highlighting machine learning applications in wastewater management, and its many applications across all IIoT verticals that rely on processing sensor data. At Hackfest, a Microsoft programming event in Redmond WA, three successful models were built for the FlowWorks application.

Piotr Stepinski, Carl’s CTO and one of the co-authors of the case study commented, “Carl’s data science team enjoyed sharing their expertise with the Microsoft developers at Hackfest. This case study proves the power of FlowWorks for helping monitor waste water and water infrastructure to reduce inaccurate sensor reading error allowing municipalities and utilities to save money.”

Greg Johnston, Carl's CEO added, "We are very proud to be in a position co-publish a case study with Microsoft. Our team continues to develop and offer the most innovative solutions in this area. We are confident that this will help the company increase our client base and introduce our applications into new verticals."

Find *Regulating Sensor Error in Wastewater Management Systems with Machine Learning* blog post here: <https://www.microsoft.com/developerblog/real-life-code/2016/12/15/Carl-Data.html>

About FlowWorks

FlowWorks is a powerful Software-as-a-Service ("SaaS")-based application for collecting, monitoring and analyzing all types of environmental data. FlowWorks is flexible, affordable and easy-to-use compared to competing software packages. The FlowWorks Application has the unique ability to collect data from all types of monitoring equipment, gauges and sensor hardware, SCADA systems and other sources of public and private data to merge the information into a single platform to perform comprehensive analytics and reporting, saving time and money for the end user. More information on the FlowWorks Application can be found at www.flowworks.com.

About Carl Data Solutions Inc.

Carl Data Solutions Inc. is focused on providing next generation information collection, storage and analytics solutions for data centric companies. Building on its recent acquisitions, Flow Works Inc., a company that helps its clients analyze and understand all forms of environmental data through a powerful platform of data collection, monitoring, analysis and reporting tools and Extend to Social Media Inc., a company that specializes in unstructured data analysis from Social Media, Carl develops applications to work with new cloud-based mass storage services and analytics tools (Big-Data-as-a-Service ("BDaaS")). Carl's development platform can accommodate virtually unlimited storage of any type of data. This technology allows Carl to build advanced applications for monitoring, reporting and analysis. Carl's data collection and storage methods allow the company to build smart Software-as-a-Service ("SaaS")-based applications that can collect data from many diverse sources and provide deep insight for decision-making purposes. More information can be found at www.carlsolutions.com.

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The Canadian Securities Exchange (operated by CNSX Markets Inc.) has neither approved nor disapproved of the contents of this press release.