

# Department of Radiology

## Faculty and Staff Research Networking Social

### “Naughty or Nice: Data Mining, List Making, and the Paradox of Perception”



**Santa Claus, ORJOE\***  
**Head of Toy and Coal Distribution,**  
**University of the North Pole**  
**Editor, The Daily Kringle**

Santa Claus, also known as Saint Nicholas, Kris Kringle, Father Christmas, or simply Santa, is a legendary figure originating in Western Christian culture who is said to bring gifts to the homes of well-behaved ("good" or "nice") children on Christmas Eve (24 December) and the early morning hours of Christmas Day (25 December).

Santa Claus is said to make lists of children throughout the world, categorizing them according to their behavior ("good" and "bad", or "naughty" and "nice") and to deliver presents, including toys, and candy to all of the well-behaved children in the world, and coal to all the misbehaved children, on the single night of Christmas Eve. He accomplishes this feat with the aid of his elves, who make the toys in his workshop at the North Pole, and his flying reindeer, who pull his sleigh. He is commonly portrayed as living at the North Pole, and often laughing in a way that sounds like "ho ho ho".

Santa's main distribution center is a sight to behold. At 4,000,000 square feet (370,000 m<sup>2</sup>), it's one of the world's largest facilities. A real-time warehouse management system (WMS) is required to run such a complex. The facility makes extensive use of task interleaving, literally combining dozens of DC activities (putaway, replenishing, order picking, sleigh loading, cycle counting) in a dynamic queue...the DC elves have been on engineered standards and incentives for three years, leading to a 12% gain in productivity. The WMS and transportation system are fully integrated, allowing (the elves) to make optimal decisions that balance transportation and order picking and other DC costs. Unbeknownst to many, Santa actually has to use many sleighs and fake Santa drivers to get the job done Christmas Eve, and the transportation management system (TMS) optimally builds thousands of consolidated sacks that maximize cube utilization and minimize total air miles.

\*Order of Right Jolly Old Elves

## Friday, December 14, 2018

3:30 to 6:30 pm

RR-202 and GoToMeeting Accessible