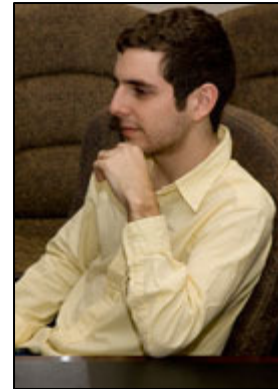


ISyE Students Finding Ways to Fight World Hunger

Six Industrial and Systems Engineering (ISyE) students recently completed a senior design project that may help fight hunger in the world. For these six students having the World Food Programme as the focus of their project meant saving dollars in order to put precious resources where they matter.



(L-R) Elhadj Bah, Alvaro Morales, Manuel Jimenez, James Wade



Santiago Aviles

The Georgia Tech engineering students – Elhadj Bah from Guinea; Alvaro Morales from Guatemala; Manuel Jimenez from Costa Rica; Santiago Aviles from Ecuador; James Wade and Lawrence Li from the United States, not only put their own international spin on their group but came together to try to make a significant impact on a humanitarian organization.

At the beginning of the senior design project, these ISyE students decided that they wanted to focus on humanitarian logistics. “We really felt that we could make a difference with our education so we started contacting organizations,” said Alvaro Morales. One of the first organizations to respond to the ISyE students was the World Food Programme, the arm of the United Nations responsible for food aid. In choosing this organization to work with the ISyE students began looking at how they could assist the organization in their supply chain and inventory management systems. “Our goal was to redesign their supply chain with the goal to maximize the number of people they can feed given their financial resources,” said James Wade. With nearly 3 billion dollars of direct expenditures, the World Food Programme reached almost 100 million people in 2008.



The ISyE students contacted the World Food Programme in the summer of 2008. Each member of the student design project team traveled to Rome, Italy during the fall semester to meet with representatives of the World Food

Programme. “We had the complete cooperation of the World Food Programme and their representatives,” said Santiago Aviles. “From the highest level, they provided input and information so that we could work on this project.”

The ISyE students built an operational tool for inventory management and a mathematical supply chain model to analyze the impact of their proposed strategic changes. “For us it meant not just saving dollars, but saving lives,” said Manuel Jimenez. “The World Food Programme is the frontline agency in the fight against hunger. Our project helped make changes that will lower costs while improving their ability to warehouse and transport food.”

The students recently presented a poster at the 2009 Humanitarian Logistics Conference at Georgia Tech. These ISyE students wanted to make a difference and, as they stated, “Our metrics were not dollars; they were human lives. Money saved for the World Food Programme means more food for more people,” said Elhadj Bah.

This unique group of students all decided to come to Tech based on the strength of the ISyE program at Tech. “We all knew that Georgia Tech had the number one ISyE program in the country,” said Wade. This national ranking is also well known in Central and South America. “A degree in Industrial Engineering is extremely valuable in the countries where several of us are from,” said Aviles, who ran a watermelon plantation in Ecuador before coming to Tech. “We wanted not only the best education we could get but the opportunities that coming to Tech provided.”