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ENGINEERS WEEK® 2006
February 19-25

National Engineers Week Foundation
1420 King Street
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SHANE R. SEVO
Wade Trim Associates, Inc.
Nominated by the American Council of Engineering Companies
Sevo, 28, uses animation, interactive panoramas, and 3D to bring project plans to life, including the Detroit Riverfront, lake rehabilitation, and streetscapes.



OROK DUKE
BP Pipelines NA Inc.
Nominated by the American Institute of Chemical Engineers
Duke, 26, developed new wastewater treatment technology for manufacturing plants in Malaysia, Taiwan, South Korea, and the U. S.



JASON BRANDON ADAMS, P. E.
U.S. Army Engineering and Support Center
Nominated by the U.S. Army Corps of Engineers
Adams, 30, created a process to define the magnitude of chemical warfare materials hazards and cost of environmental remediation.



LORA B. FREEMAN, E. I.
Parsons Brinckerhoff
Nominated by the American Society of Civil Engineers
Freeman, 24, developed a standardized bridge package now used as a training tool by the West Virginia Division of Highways.



ROGER CHANG
Nominated by the American Society of Heating, Refrigerating and Air-Conditioning Engineers
Chang, 27, develops new galleries for museums that require tight environmental controls including the Museums of Art in Cleveland and Philadelphia.



TIMO MARQUEZ ARREAZA,
ETHsustainability
Nominated by ASME
Arreaza, 30, travels the globe from his native Venezuela to promote sustainable energy options among students, non-technical professionals, and fellow engineers.



YAZHOU LIU, PH.D
THALES Group
Nominated by the Chinese Institute of Engineers - USA
Liu, 30, designs innovative aircraft power systems and was key in developing the all-electric-ship power system for the US Navy.



VANESSA KOUTROUPAS
General Dynamics Advanced Information Systems
Nominated by IEEE/IEEE - USA
Koutroupas, 26, is a member of the sustainment engineering and support team that is designing an Integrated Computer System for the U.S. Army Future Combat Systems.



MARIO A. DUARTE
City of Houston Aviation Department/Houston Airport System
Nominated by the Institute of Industrial Engineers
Duarte, 28, focuses on homeland security by analyzing efficiency of the explosive detection system at the Houston Airport.



LTJG DARRIN EUGENE BARBER
PCU TEXAS
Nominated by the U. S. Navy Nuclear Propulsion Program
Barber, 26, used his thorough knowledge of reactor plant engineering during construction of the Navy's newest attack submarine, the PCU TEXAS.



JENNIFER L. WILCOX, Ph.D.
Worcester Polytechnic Institute
Nominated by the National Science Foundation
Wilcox, 29, assistant professor at WPI, researches ways to make energy production at coal-fired plants more environmentally friendly.



TIMOTHY D. SWIETER, E.I.
Birkat Engineering, Inc.
Nominated by the National Society of Professional Engineers
Swieter, 24, provides safe control systems for theme park rides, including Revenge of the Mummy ride at Universal Studios Orlando, and fireworks control systems.



TATIANA X. HERNANDEZ, P. E.
Tetra Tech EMI
Nominated by the Society of Hispanic Professional Engineers
Hernandez, 30, developed floodplain zones for the 57,000 residents of Deltona, Florida, to prevent repeated city-wide floods.



JENNIFER SUTHERLAND
Vista Technologies, LLC
Nominated by the Society of Manufacturing Engineers
Sutherland, 28, is an expert in rapid prototyping/rapid tooling and high-speed milling, with industry innovations resulting in triple-digit manufacturing growth.



FLORIAN HOLLAENDER, Ph.D.
Schlumberger Oilfield Services, Middle East
Nominated by the Society of Petroleum Engineers
Hollaender, 29, a reservoir engineer, trains field personnel and shares technical knowledge with university students to maximize energy delivery.



REENA SINGHAL
Intel
Nominated by the Society of Women Engineers
Singhal, 27, develops pre-silicon software models of next-generation processors, and works with university students to teach "soft" problem-solving and people skills.

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Tyco Electronics Corporation
3M



Jennifer Sutherland

Nominated by the Society of Manufacturing Engineers (SME)

Operations Manager

Vista Technologies, LLC, Vadnais Heights, Minnesota

BS Mechanical Engineering, Bradley University, Peoria, Illinois, 1999

As Operations Manager, Jennifer Sutherland has employed exemplary vision, engineering and management to lead Vista Technologies LLC to the forefront of the rapid prototyping/rapid tooling industry. Her innovations in high-speed milling (speeds, feeds, automating tool path programming, fixturing and specially designed cutters), have enabled production basis manufacturing of plastic injection molds with very abbreviated lead times. As a result, Vista has realized triple digit growth in mold building – an industry that has recently seen significant competition by Chinese companies.

Sutherland is engaged in advancing rapid prototyping, particularly in the area of testing of new resins for stereolithography. She also developed a sophisticated system for online quoting and ordering, while establishing and maintaining Vista's internal networking system.

At her former position at Pentair Corp, Sutherland gained invaluable experience in design, international manufacturing, project management and outsourcing, transferring the entire engineering database of a \$60-million company to Asia and Mexico in less than one year. Additionally, Sutherland developed a new automotive lifting device resulting in a 75 percent cost savings.

At Higher Dimension Research, Sutherland took a new puncture/cut resistant material from concept to large-scale, cost effective manufacturing. She also designed and manufactured new product testing equipment.

Finally, as a person who recognizes the importance of contributing to the field of engineering, Sutherland regularly participates in Society of Manufacturing Engineer activities, as well as in youth programs that expose children to science and engineering.

Contact Jennifer Sutherland: Jenny@vistatek.com