



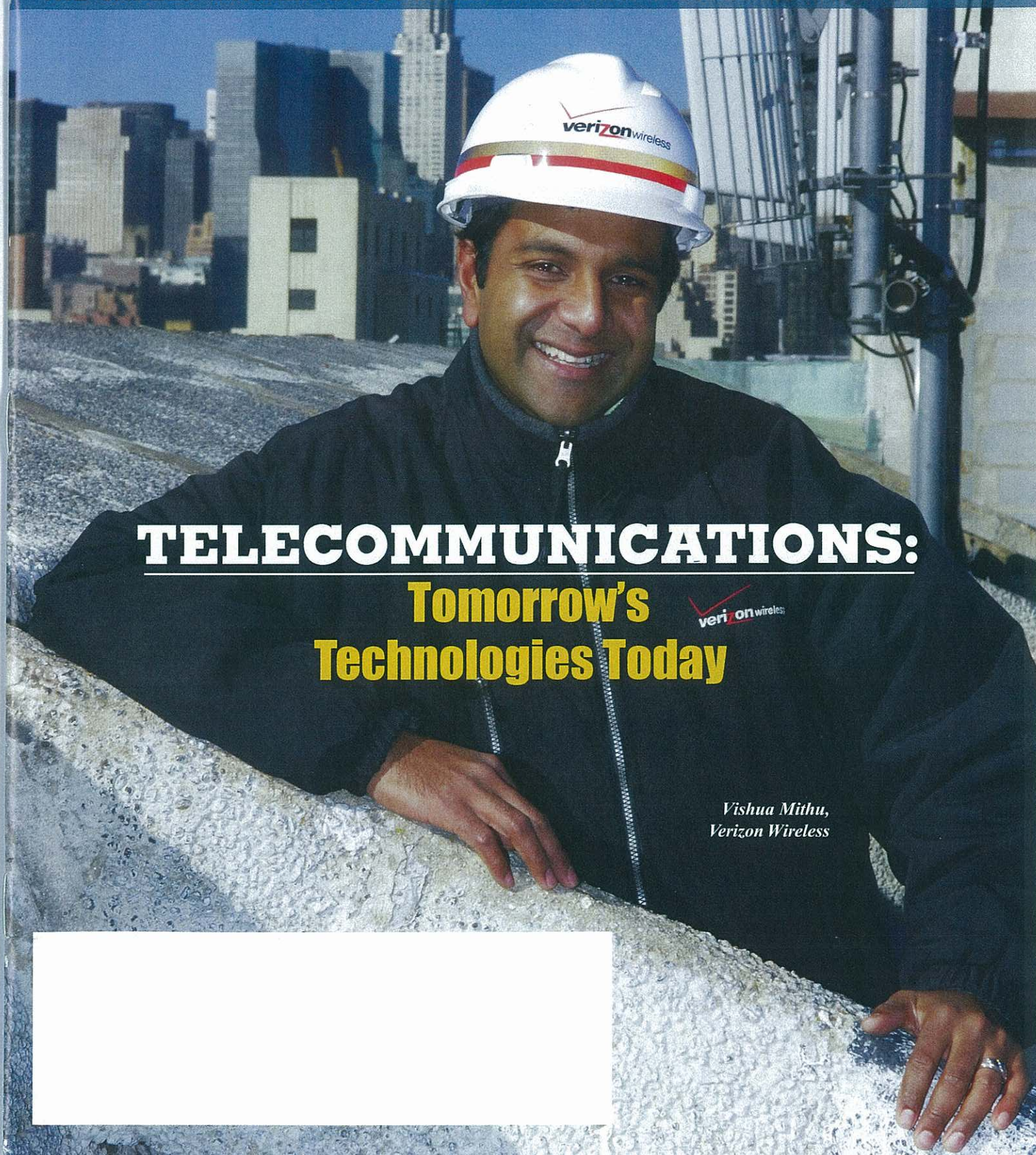
The Aerospace Industry • Mechanical Engineers • What You Need To Succeed To Get Ahead

SPRING 2008

www.eop.com

MINORITY ENGINEER

THE CAREER MAGAZINE FOR ENTRY-LEVEL AND PROFESSIONAL ENGINEERS



TELECOMMUNICATIONS:

Tomorrow's Technologies Today



*Vishua Mithu,
Verizon Wireless*



technological support of community outreach organizations. BAM supports Microsoft's ambition to create the most multicultural workplace in the high-technology industry. To learn more about Microsoft diversity, please visit the site at: <www.microsoft.com/diversity>.

**FRANK T. MARTIN, PBS&J:
MOVING DIVERSITY
FORWARD EVERYDAY**

Frank T. Martin is a bold advocate for public transit service, a fervent promoter of higher education for a diverse student population, a researcher with his finger on the pulse of the transportation industry, and a family man, photographer, and would-be golfer.

Martin is vice president and division manager of national transit services for PBS&J, a consulting firm with revenues in excess of \$500 million. He is experienced in all facets—planning, operations, administration, and security—of public transportation systems, including bus, rail, paratransit, and peplemovers. As the former chief operations officer for the Santa Clara Valley Transportation Authority in the heart of California's Silicon Valley, Martin is also



Frank T. Martin

well versed in the latest technology for public transit systems.

As a high-school student in Nashville, TN, Martin saw his neighborhood divided by the construction of Interstate 40 that bisected the community, uprooting family and friends. That experience peaked his interest in city planning. He later earned a bachelor's degree in business administration from Tennessee State University and a master's degree in urban and regional planning from Fisk University. Martin's thesis dealt with the effect highway systems had on bus routes, a throwback to personally experiencing the loss of direct transit routes when his neighborhood was disrupted.

There is no substitute.

Electric Boat is the world's foremost designer and builder of nuclear submarines, arguably the most complex machines made by man. The company's industry leadership extends back over a century to 1899 when it produced the first practical submarine for the U.S. Navy. You will have a hand in shaping the technology of the next generation of submarines as well as other advanced systems.

Engineering Opportunities

- Acoustics
- Civil/Structural
- Electric/Power
- Electronics
- Marine/Mechanical
- Naval Architecture
- Shock & Vibration
- Software CM/QA
- Software Engineering
- Systems Engineering

(Electric Boat is an SEI rated and ISO9001 organization)

We require a Bachelor's or Master's degree in Civil, Electrical, Mechanical, Structural, Aerospace Engineering, Computer Science/Engineering, or Naval Architecture. Entry level Engineering positions with 0-3 years of experience.

We offer competitive wages and benefits including:

- Medical/Dental/Life Insurance
- Excellent 401K Plan
- Relocation Assistance
- Paid Vacation
- Company Sponsored Technical Education Program

Applicants selected will be subject to a security investigation and must meet eligibility requirements for access to classified information.

To be considered for opportunities at Electric Boat, apply online at: www.gdeb.com

GENERAL DYNAMICS

Electric Boat
75 Eastern Point Road
Groton, CT 06340-4989

- US Citizenship Required -

Equal Opportunity/Affirmative Action Employer



**Creating Resources
From Wastewater**

The King County Wastewater Treatment Division is committed to protecting public health and the environment in the central Puget Sound region. Fulfilling our mission requires a diversity of employees to build, operate and maintain our facilities.

Our award-winning agency seeks professionals and tradespeople in a variety of fields. Come join one of the premiere wastewater treatment agencies in the nation.

For all current job openings go to:

<http://www.kingcounty.gov/jobs>

Division site: <http://www.kingcounty.gov/wtd>



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

During more than 30 years of transit experience, Martin has held key positions in transit planning and operations in Birmingham, AL; Gainsborough, FL; Richmond, VA; New Orleans, LA; and San Jose, CA. "Transportation is the backbone of the U.S. If goods and services can't be efficiently moved, our economy will fall apart," he declares.

Martin has always been a strong believer in giving back to the community. He calls it "paying civic rent." In 2006, then-Florida Governor Jeb Bush appointed him to the 17-member Florida Board of Governors, a governing body for the State University System of Florida, with the responsibility to oversee Florida's 11 public universities, which serve over 280,000 undergraduate and graduate students and for supporting the University of Florida Board of Trustees.

Martin sees huge potential for young professionals who want to pursue a career in transportation spurred in part by global warming. "Gen-Xers' get it. They want to live closer to work, so they don't have to drive. As we all do more to cut back to use fossil fuel, the growth of mixed-use communities—housing and office space together—will expand, and that means more transit-oriented development such as light rail trains and streetcars, and less-polluting bus systems," he explains.

The recipient of many awards, Martin is especially proud to receive the Thomas G. Neusom Founders Award presented at the 2006 Conference for Minority Transportation Officials for outstanding contributions made to the growth and development of minorities in the transportation industry. Martin believes making time for fun is essential. "Find a balance between your personal and private life. Make time for business and personal networking. Get involved in community services, and start your financial planning as soon as you can," advises Martin, who adds, "And always keep on learning."

SUPERCOMPUTING EXPERT LECTURES



Philip Emeagwali

Despite stops and starts to his formal education, Philip Emeagwali defied the odds and is now renowned for his contributions to the field of supercomputing. The Nigerian-born scientist spoke about computers and civil engineering during the inaugural event for the National Society of Black Engineers (NSBE)-University of Idaho dynamic engineers lecture series.

Born in a small town of Akure in the western part of the then British colony of Nigeria and in the wake of the Nigerian-Biafran Civil War, Emeagwali and his family were among two million displaced Igbos. His educational path was interrupted on three separate occasions, but due to his tenacity and the support of his family, he persevered and earned degrees from Oregon State University, George Washington University, University of Maryland, and the University of Michigan.

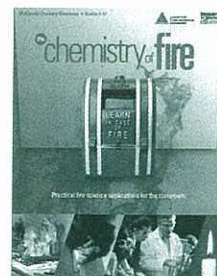
As a computer scientist and civil engineer, Emeagwali is considered to be one of the fathers of the Internet and a trailblazer in petroleum extraction. In 1989, his computational formula was used by 65,000 separate computer processors to perform 3.1 billion calculations per second in 1989. He has become one of the most notable people of African descent. New African magazine rated him as the 35th greatest African ever in a poll of its readers. In 1989, Emeagwali received the prestigious Gordon Bell prize, the "Nobel Prize of supercomputing," and then-President Bill Clinton

called him "one of the great minds of the Information Age."

"Emeagwali is a black scientist with a social responsibility," says Richard Hill, NSBE chapter president. "He uses science and his life experience as a tool to reach to his audience, and his presentation helped take NSBE-University of Idaho a step closer towards the fulfillment of the group's mission to develop and implement programs that advance the inland Northwest's interest in the various engineering disciplines and increase the number of minority students studying science or engineering at the University of Idaho in undergraduate and graduate levels."

NEW CHEMISTRY LESSONS TEACH STUDENTS ABOUT FIRE

The Society of Fire Protection Engineers (SFPE) has partnered with Discovery Education to create a new in-school program titled The Chemistry



of Fire. The program is funded by a grant from the U.S. Department of Homeland Security. The Chemistry of Fire is geared to high-school chemistry students. It will teach students the science behind fire as a way for students to fully understand the dangers of fire. As a result, it will increase the awareness of fire and the importance of home fire prevention.

"Each year in the United States more than 3,000 people die and 18,000 are injured as a result of fire. Our goal is to bring the science of fire to the classroom as a way to increase the awareness of fires and how to prevent them," says Chris Jelenewicz, SFPE engineering program manager. "It fills a void in the high-school chemistry curriculum because this infor-