

BECOME AN ENGINEER AND CHANGE THE WAY WE WATCH

MEET THE STARS THAT BRING ESPN
FROM THE STUDIO TO YOUR SCREEN.

BY KELSEY RHEA

Growing up in Connecticut, ESPN's Chief Technology Officer Chuck Pagano was not a sports fan. His passion was engineering, discovering how things worked and pursuing innovation. True to the straight talk I'm beginning to realize is his hallmark, Chuck calls himself "nosy." ▶



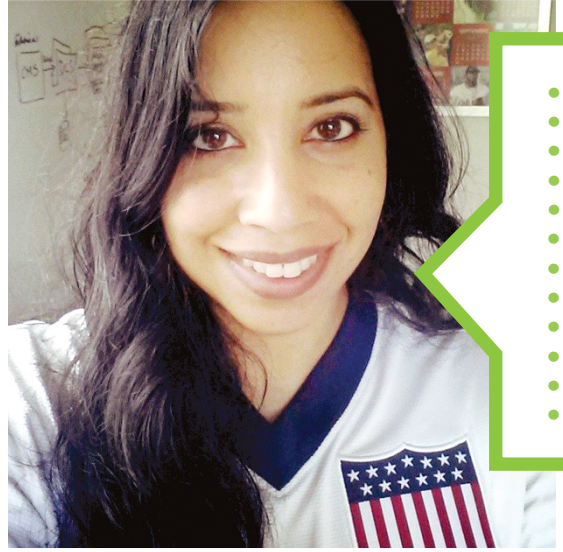
A GLIMPSE INTO THE DC2,
SPORTSCENTER'S NEW
HIGH-TECH STUDIO.



- MY NAME IS: Farhanah Sheets
- I LIVE IN: West Hartford, Conn.
- I WORK FOR: ESPN
- MY JOB TITLE: Software Engineer
- I WENT TO SCHOOL AT: University of Pittsburgh
- MY FAVORITE FAMOUS PERSON IS: Johnny Depp
- THE LAST MOVIE I WATCHED WAS: *Guardians of the Galaxy*
- THE COOLEST PLACE I'VE BEEN TO IS: Singapore, where most of my family lives.
- MY HIDDEN TALENT IS: I build pretty awesome blanket forts.



- MY NAME IS: Zachary Maura
- I LIVE IN: Kensington, Conn.
- I WORK FOR: ESPN
- MY JOB TITLE: Systems Engineer
- MY AUTOBIOGRAPHY WILL BE CALLED: *The Life of Zach Maura*
- I WENT TO SCHOOL AT: UConn
- IN HIGH SCHOOL, I WAS: Really good at math.
- MY FAVORITE FAMOUS PERSON IS: Will Ferrell
- THE LAST MOVIE I WATCHED WAS: *The Wolf of Wall Street*
- THE COOLEST PLACE I'VE BEEN TO IS: Rome, Italy
- ADVICE I WOULD GIVE TO STUDENTS IS: Always ask questions, stay engaged and give it your all.
- MY HIDDEN TALENT IS: Singing Frank Sinatra and Michael Bublé songs.



- MY NAME IS: Swati Vakharia
- I LIVE IN: NYC
- I WORK FOR: ESPN Digital Technology
- MY JOB TITLE: Senior Director, Technology Development
- MY AUTOBIOGRAPHY WILL BE CALLED: *Swati's World*
- I PURSUED STEM BECAUSE: I love computers! My first one was a Commodore 64.
- I WENT TO SCHOOL AT: The George Washington University
- IN HIGH SCHOOL, I WAS: A peer leader and played soccer, basketball and ran track.
- MY FAVORITE FAMOUS PERSON IS: Too many!
- THE LAST MOVIE I WATCHED WAS: *Dawn of the Planet of the Apes*
- THE COOLEST PLACE I'VE BEEN TO IS: Traveling in general is cool—do more of it!
- MY HIDDEN TALENT IS: I can't tell you, that's why it's hidden.

WORKING IN BROADCAST TECHNOLOGY, YOU NEVER KNOW WHO YOU'RE GOING TO MEET!



► A recent grad in the late 70s, he worked as a broadcast engineer for a local TV station. While there, he heard about a guy named Bill who was putting together a University of Connecticut alumni channel. Because he loved the medium, he jumped at the opportunity to join their team in his free time. The extra money to put toward his Harley Davidson didn't hurt either.

Being at ESPN from the start, Pagano had the

opportunity to do everything as technical director. He grew up alongside the company by building, running and pushing to bring this new concept to fruition. Having the opportunity to wear so many hats deepened his technical understanding in a unique and exciting way.

As he describes why he was willing to throw his hat in with ESPN, I can hear the passion in his voice and can't help feeling inspired by his daunt-

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less spirit. "You got to take calculated risks," Pagano shares. "Don't sweat reversible decisions."

After three years, the new SportsCenter Studio, AKA DC2, demonstrates that his most recent risks have paid off. With its wall of LED displays placed at different depths, 130 additional screens from DC1 and new technology like virtual 3D graphics, ESPN has once again revolutionized the way we consume media. Their technology has achieved the delicate balance of pushing the envelope and staying true to the foundation that Pagano and others built: putting storytelling and fans first.

Whether you're a diehard sports fan or simply someone who loves a challenge and could never be content with the status quo, ESPN Technology could be the employer for you. They employ 1,000 out of the 8,000 ESPN workers worldwide and make up the second biggest group, after production. So, if you enjoy solving problems in a fast-paced, tech-driven environment with a heart, the folks in Bristol, Conn. may have a job for you.

As Pagano prepares for retirement, he reflects back, "If I had to do it again, I wouldn't change anything. I would do it all over." ☑



BROADCAST ENGINEERING STEM JOBS BY SALARY

WANT TO KNOW YOUR STEM JOBSSM TYPE?
LOG ON TO STEMJOBS.COM AND CLICK 'TAKE
THE STEM JOBSSM TYPE QUIZ' TO FIND OUT!

	MASTER CONTROL OPERATOR	BROADCAST TECHNICIAN	MEDIA SYSTEMS TECHNICIAN	SHOW PRODUCER	DIGITAL EDITOR	BUSINESS INTELLIGENCE ANALYST	SATELLITE COMMUNICATIONS ENGINEER	TECHNICAL DIRECTOR	BROADCAST ENGINEER	DIRECTOR OF CONTENT LICENSING AND PROGRAM ACQUISITION
WHAT WILL I DO?	You run the shows, cut in the breaks and ultimately control what goes live and what does not. You run the schedule, constantly looking for efficiencies and improvements and interact with the talent and the business office to make sure all requirements for every show are met.	You assist the engineering team to support and maintain studio equipment, transmitter site equipment and automation and streaming systems. You'll need to know electronics, audio and video technology along with a healthy dose of information technology and networking.	You used to deal with just audio or video, but the nature of the technology today requires far more skill integration across multiple media platforms, both in terms of software mastery as well as equipment and knowledge of the science behind it all.	You work with news or content management teams, anchors, reporters, editors and technical crews to frame and execute the production aspects of the show. Your handle on STEM skills and knowledge make a huge difference in keeping pace with rapidly advancing technologies within a highly competitive industry.	You take huge amounts of video, audio or other digital content and cut it down to just the parts we want and need. This is a technical position that incorporates a great deal of decision-making, planning and creativity.	You gather, analyze and report on quantitative and qualitative data and transform it into something meaningful. Companies used to rely on "gut instinct" and they still do ... yours.	You run the "earth station" part of the satellite communication network. You are in charge of the facilities that house all the equipment, with a special emphasis on creating and maintaining connections with broadcast satellites.	You oversee all technical operations at the network level, which includes synchronizing multiple broadcast sites and studios. You also are responsible for technical vendors and the contracts that keep everyone up and running.	You are the lead on the broadcast team, with working knowledge of all the systems in use. You are likely on call, as broadcasts typically run non-stop, and you are the one that understands and implements all of those FCC rules and regulations.	Your job is to find the next greatest hit and then make money on it. Analyzing data, tracking financials, using higher level math in forecast modeling and risk analysis are all tools of the trade.
MEDIAN SALARY	\$35,000	\$39,000	\$43,000	\$58,000	\$63,000	\$70,000	\$84,000	\$89,000	\$92,000	\$140,000
STEM JOBS SM TYPE	Producer	Solver	Solver	Integrator	Designer	Investigator	Designer	Advisor	Designer	Integrator
WILL I LIKE IT?	You count buttons, knobs and sliders to go to sleep.	At holiday events, you are the one with the camera.	For you, a stream that has Phish makes sense.	Your neighbors referred to you as "Diva" when you were growing up.	You cut everything down to size.	This is a mission statement, not a job title.	Let's face it, satellites are the coolest things ever.	Having ideas is great, having the right tools is essential	When something breaks, yours is the number on everyone's speed dial.	Someone has to pay for all the talent.
SCHOOLS THAT TRAIN	<ul style="list-style-type: none"> College of the Ozarks Lyndon State College New England School of Communications Northern State University Webster University 	<ul style="list-style-type: none"> Asbury University Bates Technical College Bowie State University Buffalo State SUNY Towson University 	<ul style="list-style-type: none"> Columbia College New York University St. John's University St. Joseph's College Wilmington University 	<ul style="list-style-type: none"> Lubbock Christian University Northwestern University St. Francis College Valparaiso University Western Carolina University 	<ul style="list-style-type: none"> Chapman University Emerson College Full Sail University Savannah College of Art & Design University of Southern California 	<ul style="list-style-type: none"> Bentley University Corban University Missouri State University St. Bonaventure University Texas Wesleyan University 	<ul style="list-style-type: none"> Florida International University Marquette University University of Maryland University of Oklahoma Western Michigan University 	<ul style="list-style-type: none"> Marquette University Oakland University Pacific Lutheran University San Francisco State University St. Thomas Aquinas College 	<ul style="list-style-type: none"> Academy of Art University New York University Southern California Institute of Technology University of Wisconsin-Stout Western Michigan University 	<ul style="list-style-type: none"> Illinois Institute of Technology Illinois Wesleyan University Kaplan College San Antonio Ingram Marshall University University of Washington
WHO'S HIRING	<ul style="list-style-type: none"> 21st Century Fox Cablevision Systems Corp. CBS Television Stations Sinclair Broadcast Group 	<ul style="list-style-type: none"> EchoStar Gannett iVideo Pinnacle Wireless Tektronix 	<ul style="list-style-type: none"> Comcast Intelsat MLB Advanced Media NBC Sports Group Viejas Enterprises 	<ul style="list-style-type: none"> Cox Media Group Discovery Communications RadioOne Time Warner Cable Tribune Company 	<ul style="list-style-type: none"> The Creative Group ESPN McGraw-Hill Education The New York Times Turner Broadcasting 	<ul style="list-style-type: none"> Datalogix Motion Picture Association of America OpenX Specific Media WWE 	<ul style="list-style-type: none"> Clear Channel Communications Cumulus Media Lockheed Martin QVC Sabre Systems 	<ul style="list-style-type: none"> CBN MediaVest Omnicom Media Group Resolution Media Time Inc. 	<ul style="list-style-type: none"> AVI Systems DIRECTV ESPN NBC Universal Sirius XM Radio 	<ul style="list-style-type: none"> Condé Nast ESPN Hulu McGraw-Hill Education National Geographic