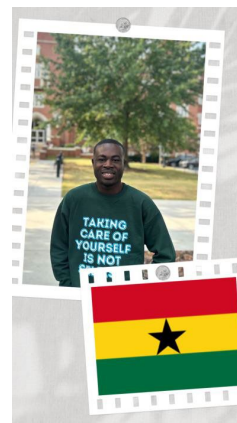


September 2024 Spotlight

Foster Opoku



Foster Nana Fosu Opoku hails from Kumasi, Ghana, a region in West Africa. He grew up in a strict and disciplined household where being a good person, studying hard, and maintaining discipline and determination were highly valued. Foster's father placed a strong emphasis on academic success, not just for him but also for his two brothers. His father's unwavering focus on grades, even expecting first place every time, instilled in Foster a relentless drive to excel in his studies. The pressure was significant—his father would check grades every semester and would scold them even if they were second in class. This environment fueled Foster's commitment to studying hard throughout his education. This drive carried him through his education, culminating in a Bachelor of Science in Mathematics and Economics (Double Major) from the University of Cape Coast.

Following his graduation, Foster contributed his expertise to the Research Department at the Ghana Revenue Authority (Headquarters), where he played a key role in several impactful projects, including PAYE frequency distribution, predictive models for revenue forecasting, and VAT invoicing—all of which significantly influenced tax reforms in Ghana. His passion for applying mathematical, statistical, and economic principles to real-world challenges became evident during this time. Foster's interest in mathematics and statistics was sparked by his experience in the Research Department of the Ghana Revenue Authority. Witnessing the practical applications of these fields in scientific research led him to develop a strong passion for research work and data analysis. He enjoys thinking critically, and a career in mathematics allows him to use his mind every day.

Foster's commitment to leadership has been a consistent theme throughout his academic journey. He served as the school prefect in both junior and senior high school, where he advocated for students' rights. At the University of Cape Coast, Foster held the role of First Deputy Speaker at the Parliament House, where he presided over parliamentary sessions and championed the welfare of students. Notably, he was instrumental in drafting and reviewing the new constitution for the University's Student Representative Council, which was enacted in 2023.

One of the toughest challenges Foster has faced as an international student has been adapting to the U.S. education system. The new environment, teaching culture, and varying accents have all been difficult to navigate. He advises other students that if there are 100 points up for grabs, they should aim for all 100.

Foster is proud of his achievements, including his presentation at the 9th Annual Conference on Biostatistics and Bioinformatics in Atlanta, Georgia. His research on the "Prevalence of PIZ and PIS alleles of alpha-1-antitrypsin deficiency: A Study on Hardy-Weinberg Equilibrium" was well-received, providing him with the opportunity to connect with

other researchers and learn from their experiences. As well as presenting his work at the 2024 UTC Spring Research and Arts Conference.

One of his proudest accomplishments is achieving a 4.0 GPA in the Spring 2024 semester. After facing setbacks in the Fall 2023 semester, Foster reorganized, remained resilient, and reworked his strategies to meet his target.

Few know that Foster is a skillful football midfielder with excellent ball control, high passing accuracy, and precise shooting skills. He played for Happy Stars Academy in Kumasi. To unwind after a stressful day or week, Foster listens to the latest trending music, which helps him relax and recharge.

October 2024 Spotlight

Mark Horlu



Mark is from the town of Have, Ghana, a place where a rich diversity of languages and cultures thrive. He received his undergraduate degree from the University of Cape Coast in Ghana and is currently pursuing a master's degree in applied mathematics. As an active member of the American Mathematical Society and a student at UTC for the past year, Mark is passionate about making a positive impact in his community. He aims to inspire others from similar backgrounds by proving that with dedication and hard work, anything is possible.

Mark has diverse professional experiences. He tutored students at Yierel Bracha School and served as a high school teacher for two years at Unity International College in Ghana. He also completed an apprenticeship as a Business Analytics Trainee with Azubi Africa. Additionally, Mark worked as a data collector and served as a Supervising Registration Officer, showcasing his many talents and commitment to education and analytics.

Mark teaches math recitation classes at UTC. His students enjoy his engaging teaching style just as much as he loves teaching and learning alongside them. Mark also contributes to his local community through his church, Revival International Church in Chattanooga, where he takes photos for church platforms. At an early age in Ghana, he served on the finance committee and usher board at his home church. His advice for fellow students is to maintain a healthy balance between academic and personal life while maximizing the available opportunities.

Mark's dedication to education shines through his work with the Upward Bound program summer of 2024. As a teacher, he guided students from Brainerd and Howard High Schools, sparking their interest in mathematics. Twyler Boykin, Upward Bound Math/Science Program Director, highlighted that Mark was one of the best choices for the program due to his ability to engage and connect with students. Many of his students are now considering majoring in mathematics at UTC, inspired by Mark's encouragement and effective teaching methods.

Mark loves to unwind by listening to music and cooking traditional Ghanaian dishes. Sharing these meals with friends allows him to celebrate his cultural heritage and pass on the values and history of his homeland.

Mark chose to pursue mathematics because it offers interdisciplinary knowledge that can be applied to solve real-world problems. His journey exemplifies the power of perseverance, passion, and the willingness to make a difference.

November 2024 Spotlight

Lucas Everham



We're excited to welcome Lucas Everham to the math family as our November spotlight. Lucas joins us as a Visiting Lecturer, bringing a unique background and inspiring story to our department.

Lucas is originally from Virginia, grew up in Fort Myers, Florida, where his immediate family still resides. His academic journey began with an undergraduate degree from Florida Gulf Coast University, followed by graduate studies at the University of Idaho. Lucas has also spent time in Taos, New Mexico, and San Bernardino, California, adding to his diverse experiences.

Lucas has a strong dedication to education and remains a dues-paying member of the Florida Educator's Association. He also plans to join the Southeastern Climbers Coalition, blending his academic interests with his love for outdoor activities. Lucas started at UTC in August 2024 and brings both enthusiasm and a wealth of knowledge to his teaching role.

Inspired by his parents, both college-educated, with his father involved in higher education throughout Lucas's life, Lucas's journey in academia hasn't always been easy. He recalls a challenging first semester in graduate school, where he felt out of place and even considered leaving. However, teaching his own section of calculus II the following summer reignited his passion for education, solidifying his commitment to the teaching path.

Lucas believes in pushing boundaries, both personally and academically. He encourages students to embrace the discomfort of feeling "dumbstruck" as a sign of growth. "I'd like students to understand that it's ok to feel stupid on a regular basis. If you don't, it means you aren't pushing yourself hard enough." For him, success isn't about awards or public recognition; it's about staying true to himself and giving his best in every situation.

Outside of academia, Lucas is an avid cyclist and rock climber. He started exercising regularly to manage a ruptured disc in his back, which he's had since he was 18. This commitment led him to complete his first "century" (100-mile ride) last year—a testament to his perseverance.

Lucas's journey into mathematics began with a love for simple number relationships and helping friends with calculus. His early classes in proof writing and discrete math felt like a natural fit, and he has been on this path ever since.

Welcome, Lucas! We're thrilled to have you as part of our team and look forward to all you bring to our department.

January 2025 Spotlight

Fatma Ayça Çetinkaya



Fatma Ayça Çetinkaya was born in Turkey and proudly identifies as a 1990s child. She grew up in a nostalgic era when taking a photo meant pressing her eye to the camera viewfinder and flipping through encyclopedias was essential for school research. Ayça fondly recalls waiting by the radio, eager to record her favorite songs onto cassette tapes. A testament to the creativity and patience of the time.

Ayça's childhood was shaped by frequent moves due to her father's job. Changing schools, adapting to new environments, and making new friends were challenging experiences that she disliked at the time. However, as she grew older, Ayça came to appreciate how these constant transitions allowed her to meet people from diverse social, religious, and cultural backgrounds, broadening her perspective on the world.

Ayça completed her undergraduate studies at Ankara University before earning both her master's and PhD degrees at Mersin University. Her professional career began there in 2009 as a research assistant, and after 15 years of dedication, she recently joined the Department of Mathematics at UTC. Thrilled to be part of such a supportive and inspiring environment, Ayça focuses her research on the spectral theory of differential operators, with a particular emphasis on inverse spectral problems.

Ayça values many aspects of her career, including attending conferences, collaborating with fellow mathematicians, mentoring students, and teaching. However, she is equally determined not to let her profession define her entirely.

In her free time, Ayça enjoys challenging her limits through fitness. She has explored Pilates, antigravity fitness, strength training, and yoga, and has recently discovered a love for barre classes. A passionate reader and traveler, Ayça also channels her thoughts into writing, maintaining both a blog and a personal journal, which she updates at least once a month.

Ayça's favorite book is *The Little Black Fish* by Samad Behrangi, which she loves so much that she has a tattoo inspired by it. One of her proudest and quirkiest accomplishments is her nearly 2,500-day streak on Duolingo, reflecting her dedication and persistence in learning.

Ayça's journey, shaped by adaptability, intellectual curiosity, and a commitment to personal growth, is an inspiration to everyone she meets.

February 2025 Spotlight

Shahidul Islam



MD Shahidul Islam, a Ph.D. student at the University of Tennessee at Chattanooga, shares a journey rooted in resilience, determination, and a commitment to lifelong learning. His story begins with his mother, the heart of his journey. After the passing of his father during his childhood, Shahidul's mother became his sole support and the cornerstone of his life. She not only guided him through challenges and successes but also instilled in him the deeper values of family, friendship, and community. She often reminded him, *"Achievements mean little without family."*

Carrying these values forward, Shahidul continues to strive for self-improvement. He is also the first in his family to complete a university degree, earning a bachelor's in mathematics with First Class Second honors and a second major in Computer Science and Engineering from Shahjalal University of Science and Technology in Bangladesh. He went on to complete a master's in mathematics at the same institution, graduating with First Class First honors and receiving a prestigious gold medal from the AF Mujibur Rahman Foundation in Bangladesh for his academic excellence.

Following his postgraduate studies, Shahidul served as a lecturer in the Department of Computer Science and Engineering at Green University of Bangladesh for approximately one and a half years. During this time, he published four peer-reviewed journal papers in Mathematical Biology, with a focus on Evolutionary Game Theory using Social Complex Networks and using Machine Learning algorithms for disease-spread prediction. His dedication to research extended beyond the classroom, as he volunteered at IEEE conferences such as STI 4.0 and 5.0, gaining valuable insights from the global research community.

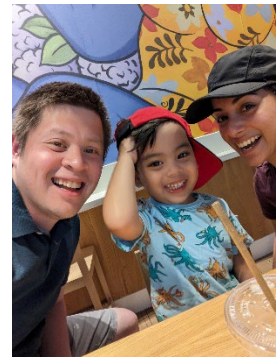
Recognizing the need to deepen his expertise in biomathematics, Shahidul sought a mentor with substantial experience in the field. This led him to Dr. Jin Wang, whose guidance Shahidul believes will enable him to make groundbreaking contributions to the field.

Outside his academic pursuits, Shahidul dreams of traveling the world to embrace diverse philosophies, cultures, and cuisines. He also aspires to establish an organization dedicated to fulfilling dreams and providing access to quality education. He firmly believes in mutual respect, stating, *"Respect is a two-way street—when you give respect, you earn it in return."* Shahidul's faith in Allah inspires him to strive for excellence and motivates him to trust in himself, give his best effort, and believe in the inevitability of success.

Beyond his research and studies, Shahidul fosters a sense of community at the university by creating opportunities for faculty, staff, and students from all departments to connect and engage. He is working on organizing a Math Cricket Team, has proposed board game sessions, and actively supports departmental colloquiums by contributing thoughtful and insightful questions. Known for his caring nature, Shahidul is always willing to assist professors and colleagues whenever needed. His dedication to building connections and supporting others reflects his belief in the power of community, leaving a lasting impact on everyone he meets.

March 2025 Spotlight

Matthew Villanueva



The Mathematics Department proudly features Matthew Villanueva, an Associate Lecturer of Mathematics whose journey from struggling with math as a child to inspiring students at UTC is nothing short of remarkable.

Matt's path to mathematics wasn't always clear. Math was actually his worst subject as a kid. But everything changed in fifth grade when a teacher helped him see that math isn't about memorization. It's about thinking. That spark turned into a passion, leading him to Rutgers University in New Brunswick, New Jersey, where he earned his bachelor's degree in mathematics. He later pursued graduate studies in Mathematics Education before life took an unexpected turn. His lovely wife, Linda, landed a job as a clinical pharmacist in Chattanooga. Embracing the move, Matt completed his master's in mathematics at UTC, where he has now been teaching since 2017. While his professional life revolves around numbers and problem-solving, his greatest joy comes from his family. He and Linda share their lives with their adventurous 4-year-old son, Nathan, who keeps them on their toes with endless curiosity and energy. Whether tackling mathematical puzzles or bedtime stories, Matt finds joy in both his academic and personal worlds.

Over the past eight years, Matt has built a reputation not just as an educator, but as a mentor. He takes great pride in the lasting connections he's formed with students, many of whom still drop by his office for advice and sometimes just to catch up. His dedication was recognized with the Outstanding Mentor Award from the Student Government Association. He also created the First-Year Experience course, "Puzzle and Problem Solving Through Recreational Mathematics," designed to help students develop critical thinking skills through fun and engaging challenges.

Matt's colleagues also appreciate his collaborative spirit, always eager to exchange ideas and support his peers. Whether working on new teaching strategies or sharing a laugh, Matt brings enthusiasm and energy to the department and most of the times literally, as he's often spotted jogging through the halls between classes.

Beyond the classroom, Matt is involved in the College of Engineering and Computer Science Residential Learning Community, where students extend their education beyond the classroom and textbooks, learning where they live.

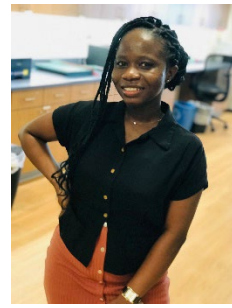
Outside of academia? You might spot Matt running laps around Chamberlain Field or the Riverwalk this is one of his favorite ways to unwind. He's also a mystery buff, often diving into detective novels or crime dramas. But here's something you might not know he loves to sing. Whether it's karaoke with friends or humming a tune during his runs, music is a big part of his life.

When it comes to advice for students, Matt tailors his wisdom to their journey. For freshmen, he stresses the importance of learning how to study effectively. He explains how college is a different world from high school. For upperclassmen, he encourages networking, collaboration, and learning how to present themselves in professional settings.

Matt's story is proof that the right teacher can change everything. From struggling with math to becoming an inspiring mentor, he embodies the power of perseverance and passion. We are proud to have him as part of the UTC Mathematics Department.

April 2025 Spotlight

Hagar Cobbinah



Hagar Cobbinah, a graduate student at the University of Tennessee at Chattanooga (UTC), is originally from Prestea, a mining town in Ghana's Western Region. She credits her parents, Grace Quaicoe and Godson Cobbinah, for their unwavering support in shaping her academic journey. Hagar began her education at Prestea Goldfields School and Catholic Junior High School before advancing to Nsein Senior High School, where she majored in General Arts. She later earned a Bachelor of Science in Statistics from the University of Cape Coast (UCC) in Ghana. Currently, she is pursuing her master's degree in mathematics with a concentration in Applied Statistics at UTC.

Hagar is an active member of the Association for Women in Mathematics (AWM), UTC Chapter, where she also serves as the chapter president. She is also a member of the Ghana Association of Statistics Students. She began her studies at UTC in August 2023, drawn to the program's strong research opportunities and supportive academic environment.

Hagar's biggest inspiration has always been her parents. Though they never had the opportunity to attend college, they instilled in her the importance of education and encouraged her to aim higher than they ever could have imagined. This motivation has helped her push through challenges, including adjusting to a new academic system and culture as an international student. Balancing coursework, research, and teaching responsibilities while being far from home has required resilience and faith, but she has embraced every challenge as part of her growth.

Hagar's academic achievements speak to her dedication. At UCC, she received the Dean's Award for Academic Excellence for two consecutive years and graduated as the best female student in Statistics in her department. At UTC, she has worked on several research projects as a Graduate Research Assistant. Under Dr. Lakmali Weerasena, she contributed to a project using Graph Convolutional Networks to tackle the Set Covering Problem in mathematical optimization. With Dr. Ziwei Ma, she participated in a biostatistics study analyzing risk factors associated with Alpha-1 Antitrypsin deficiency. Additionally, she collaborated with STEM department heads on a data analytics project examining high DFW (Drop, Fail, Withdraw) rates at UTC, exploring data-driven solutions to improve student success. These experiences have strengthened her analytical skills and prepared her for future doctoral studies in applied mathematics and biostatistics.

Among her proudest accomplishments are securing a competitive graduate assistantship in the U.S., contributing to cutting-edge research, and gaining confidence in teaching at the college level. When she's not immersed in numbers, Hagar enjoys writing poetry, particularly reflections on faith, hope, and identity. She also finds comfort in watching African films, which keep her connected to her culture and home. To unwind after a long day, she reads Scriptures and occasionally watches movies.

Hagar chose mathematics because of her deep passion for problem-solving and pattern recognition. She sees math as a universal language that explains real-world phenomena, while statistics provide the tools to make sense of uncertainty. She is excited about how mathematics applies across disciplines, from public health to artificial intelligence.

Throughout her time at UTC, she has had the privilege of working with Dr. Lakmali Weerasena, Dr. Ziwei Ma, and Dr. Christopher Cox, all of whom have played a significant role in her academic journey. Hagar's story is a testament to dedication, resilience, and the power of mentorship, and the UTC math community is proud to have her as part of the program.