

FALL 2023

CAPITOL

C H R O N I C L E

LEADING IN CYBER

Our top 8% Forbes recognition and more.

MAKING AN IMPACT

Giving back to make a difference.

NEW LABS COMING

Lab renovations coming in Fall of 2024.



CAPITOL TECHNOLOGY UNIVERSITY'S BI-ANNUAL PUBLICATION FOR ALUMNI, FACULTY, STAFF, STUDENTS, PARENTS AND FRIENDS.

A MESSAGE FROM THE PRESIDENT

This fall, we welcomed our students back for the start of another exciting school year. Eager to embrace the Capitol experience, they quickly immersed themselves in our campus culture by establishing new clubs during our Club Fair, networking for success during our Career Fair, and getting a great start to their education! Enrollment in our master's, bachelor's, and doctoral programs has witnessed a record high this year, indicating the enduring impact we have on both prospective students and alumni, and we value our pivotal role in the advancement of higher education.

Every October marks the observance of Cybersecurity Awareness Month and this year, our emphasis was on the evolving challenges to cyber education. With the increasing prevalence of cybersecurity, artificial intelligence, and machine learning in our socio-economic landscape, these challenges are expected to worsen. As a trusted leader in higher education, Capitol Technology University is dedicated to leading STEM studies and preparing our students for their future endeavors. Through our unique resources, like our "teach the teacher"-style summer programs, hands-on industry-standard labs, and strong partnerships with leaders in technology, we confidently prepare our learners and educators for sustained career success.

Over the summer, we introduced our Capitol Cyber Sleuths program for educators as a collaborative effort with the NSA GenCyber initiative. This program is just one of our strategic responses to the growing challenges that are facing higher education and the field of cyber as we remain committed to ensuring the accessibility of cyber education resources to all students and their teachers. Additionally, we attended DEF CON for their 31st convention in Las Vegas, where we showcased our new cyber programs as well as our student-developed electronic badge, which was a true testament to their remarkable craftsmanship and creativity.

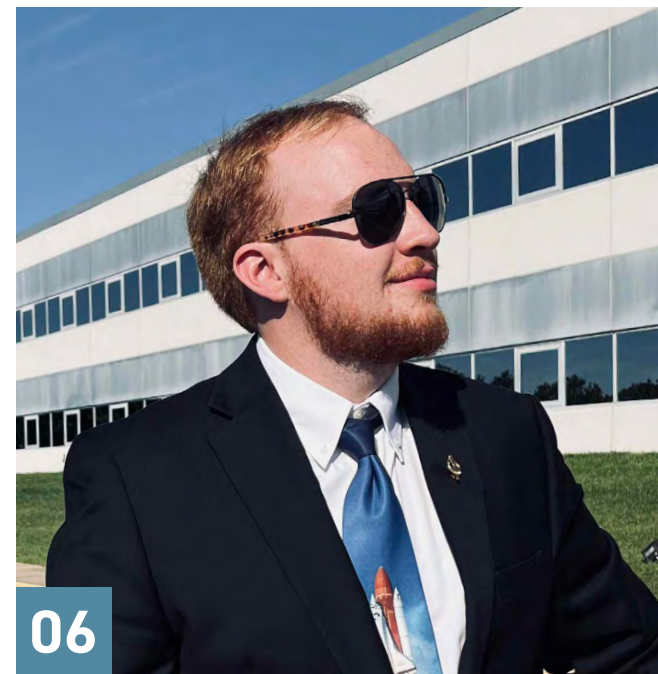
In this edition, you will read about our exceptional faculty, students, and alumni and the important work they are doing, as well as the groundbreaking developments being made to our campus. There are many exciting projects underway, and we hope that you will be an active part of our journey. Your support enables us to nurture a future-ready community of tech-forward professionals and though we anticipate challenges to cyber education in the new year, I trust that together, we can overcome any obstacle.



Bradford L. Sims, Ph.D.



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06



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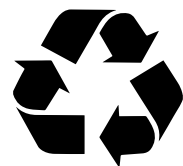
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How Capitol Stands at the Forefront of Cybersecurity



Capitol Technology University, while a worldwide leader in 12 high-quality fields of study, is undeniably best known for its extraordinary cybersecurity program. This highly regarded subject area accounts for nearly half of all degrees conferred by the university, and some of the most significant recognitions for Capitol Tech have been related to cyber. To maintain its position as a leader in this ever-evolving space, Capitol works hard to remain at the forefront of new innovation. Through numerous industry and professional partnerships, a titan of a competitive cyber battle team, globally recognized faculty members, and continuous improvements to the curriculum and course offerings, Capitol has established itself as a force to be reckoned with in the realm of cyber.

Cybersecurity first gained prominence at the university around the beginning of the new millennium. Pioneered by former professor David Ward, the degree formerly known as Information Assurance saw a spike in enrollment following the 9/11 attacks. Ever since, Capitol Tech has had a gleaming reputation in cybersecurity and has received numerous honors and accolades recognizing its excellence. One such recognition is Capitol's designation as a National Center of Academic Excellence in Cyber Defense (NCAE-CD) by the National Security Agency (NSA) and Department of Defense (DoD). Capitol leads the NCAE Northeast Regional Hub, a community of cyber experts who promote excellence in cyber education, research, and practice. The hub and its members work collaboratively to address challenges in the evolving field

and move toward a successful digital future. Capitol Tech also received the prestigious 2020 SC Media award for Best Cybersecurity Higher Education Program, which cited the university's hands-on teaching methods, extensive degree options at all levels, state-of-the-art labs, industry partnerships, and student employability. Following this recognition, Vice President of Academic Affairs Dr. William Butler received the 2021 SC Media award for Outstanding Educator. Most recently, Capitol Tech ranked within the top 8% of colleges in the US by Forbes, alongside some of the nation's most well-known institutions such as Massachusetts Institute of Technology and Embry-Riddle Aeronautical University.



One of Capitol's greatest assets to the cybersecurity program is Signal-9, the highly competitive cyber battle team. Made up of motivated cyber students from all grade levels, the team regularly participates in both in-person and virtual events, going head-to-head with teams from all over the nation. One of the most common competition formats is a virtual Capture-the-Flag (CTF), in which participants work through coding challenges and locate system vulnerabilities to collect "flags." Some of the notable CTFs and similar events that Signal-9 has attended include the 2022 Information Security Talent Search (ISTS) competition, hosted by Rochester Institute of Technology, 2022 Hack the Port, hosted by the Maryland Innovation and Security Institute (MISI) and Dreamport in partnership with the US Cyber Command, and the 2022 Mid-Atlantic Collegiate Cyber Defense Competition (MACCDC) in which they made it to the regional finals. Most recently, Signal-9 took part in MISI and Dreamport's Hack the Railroad CTF on October 25 and 26, 2023. Team members Aidan Fitzgerald, Kyle Goulet, Darius Nalley-Stoddard, Ian Davis, and Logan Brewer attempted to hack into a simulated railroad environment using real-world industrial control systems (ICS). While this was set up as a training rather than a formal competition, the team still performed well, managing to obtain the majority of the hidden flags.



Signal-9's success has proven to elevate Capitol higher in the world of cyber, and has facilitated numerous opportunities for both team members and the university as a whole. In February 2023, Capitol Tech signed a Memorandum of Understanding (MOU) with Percival Engineering, which was instrumental to the development of Capitol's new PhD program in Offensive Cyber Engineering. As part of the understanding, Capitol offers Percival members discounted rates on tuition and access to campus spaces for events. This is not the only cyber-related partnership that Capitol maintains; the university has numerous agreements with industry and governmental organizations focused on furthering the mission of cyber education. Capitol has active relationships with major industry names like the Hammers Company, TechnoGen Cybersecurity, Sixgen inc. and many others. These ongoing affiliations ensure that the university's offerings stay abreast of new developments in the field, as well as provide internship and employment opportunities for students.

Looking ahead, Capitol continues to develop and evolve its cybersecurity offerings to provide students with a clear pathway to success. Dr. William Butler discusses the industry's urgent need for cyber science educators to lead the next generation of students to roles in the cyber field. "Cyber science faculty members are essential for educating the future workforce, conducting cutting-edge research, and addressing the complex challenges posed by technology and securing them," Butler explains. "Their role is critical in preparing students for careers in the digital economy and advancing our understanding of cyber science and its impact on our society."

To address this need, Capitol Tech recently added two new cyber-focused degree programs to its offerings, the Master of Education in Cyber Science, which is designed for new or current educators who wish to advance their skills in teaching and research, and the Doctor of Education in Cyber Science, for highly experienced cyber professionals who wish to rise to the top of the field with the creation of new ideas and knowledge.

"Their role is critical in preparing students for careers in the digital economy and advancing our understanding of cyber science and its impact on our society."

-Dr. William H. Butler,

Vice President for Academic Affairs,
on the importance of Cyber Science
Educators.

Beyond the new degrees, Capitol Tech plans to continue fostering students' interest in cyber education through engaging and interactive activities such as webinars, open houses, and Cyber Saturdays, along with upcoming events like the Capitol STEM Challenge slated to take place on April 6, 2024. By introducing cyber concepts to prospective students, Capitol hopes to ignite a passion for cyber in the younger generation and encourage the cultivation of future leaders.

With the help of valuable industry partners, innovative students, expert faculty, and a plethora of ever-evolving knowledge, Capitol will continue to grow as a leader in cyber education for generations to come.

Student Spotlight: Elijah Emory



For senior Astronautical Engineering major Elijah Emory, learning about space came as naturally as learning how to walk.



As a child, he reveled in watching the skies and soaking up the wonder of the cosmos, dreaming of ways to get closer to the edge of the universe. He was especially fascinated by the engineering marvels that allowed humans to interact with space in ways

never thought possible. He vividly recalls watching the final shuttle launch while he was in elementary school, then the New Horizons flyby of Pluto and the first manned Falcon 9 launch in high school. The spaceflight revival lit a fire within Elijah, and he eagerly awaits the day that humans will return to the moon so that he can be a part of the adventure.

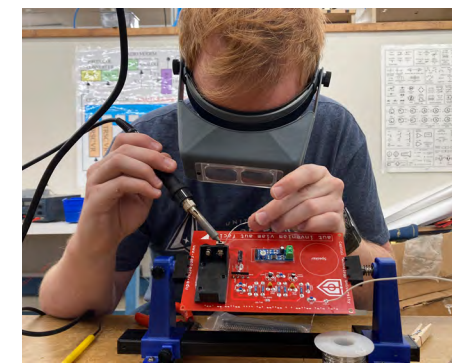
Elijah chose Capitol Tech for his college experience after researching various schools that offered an Astronautical Engineering program of study. He appreciated Capitol's tight-knit culture that provided excellent opportunities for one-on-one collaboration with professors and peers. The small campus size was the greatest draw, and Elijah knew that he would be able to make a significant impact on team projects in such an intimate, focused community.

Elijah has always been a familiar face around campus, establishing himself as a leader amongst his peers from the

very beginning of his college career. Upon arriving at Capitol, he sought out clubs related to his interests and wasted no time getting involved. Some of the earliest activities he recalls participating in were star parties hosted by the Astronomy Club, which introduced him to people who would become dear friends. "Clubs have been the lifeblood of a lot of the student activities here at Capitol, and it's been fun plugging in when I can to host and join events," he says. Since then, he has been actively involved in countless projects related to astronautical engineering, from payload launches to satellite design. Elijah also manages the Space Flight Operations Training Center (SFOTC) along with the Fusion Lab, a multidisciplinary maker space where students from various majors can work collaboratively. In both of these roles, he assists fellow students and helps them apply concepts from class into hands-on projects. "It feels like a way to give back to all the seniors that helped me along with academic projects and inspired me to do more," he says of the work. "I'm glad we've set something up for the next generation of students, and I hope it continues giving back to Capitol with projects anyone can put their skills and passion into."



One of Elijah's most memorable projects and proudest achievements as a student was his work on the TRAPSat high-altitude balloon payload. He served as the student lead for this endeavor, which involved updating the previous TRAPSat mission payload to add a discrete sampling door. "The TRAPSat High Altitude Balloon payload was a challenging and rewarding experience that really grew me as an engineer and leader. I learned a lot about integration, soldering, trade studies, testing, team dynamics, and prototyping among many other things, but the best stuff came from all the amazing people I got to learn from," he says. He fondly remembers the culmination of the project after months of hard work; driving to the launch site in West Virginia in a packed car surrounded by the teammates who helped construct the payload was an unforgettable adventure. "I think the best experience I've had was watching the weather balloon lift our payload from my hands and seeing it soar off into the sky, then meeting up afterwards to celebrate at iHOP and later seeing the video of that beautiful blue line at 70,000 feet. We did it, we touched the edge of space."



In addition to the balloon payload, Elijah has worked on a variety of other projects throughout his time at Capitol, including the 2023 Capitol Tech badge design for DEF CON, an annual hacker convention where Capitol exhibits. Over the summer, Elijah designed and

prototyped the printed circuit board (PCB) for Capitol's badge, which has the ability to detect radio frequencies emitted by various objects.

"Almost everyone I've met along my academic career are also driven individuals, and surrounding yourself with honest friends both in academics and clubs/extracurriculars builds everyone up.

It may take a village, but we can find a way or make one."

-Elijah Emory,
Astronautical Engineering Major

In addition to the DEF CON badge, Elijah spent the summer testing rotors for Capitol's upcoming Wideband Operations Radio Field (WORF) project. He has also begun work on his senior design project of a lunar regolith (AKA "moon dust") sintering rover, which is currently in its early phases of development. Because of his stellar academic performance and widespread involvement on campus, Elijah was the proud recipient of the 2023 Avrum Gudelsky Memorial Scholarship, the highest academic honor that Capitol confers each year.

Looking ahead, Elijah has his sights set on a systems engineer role post-graduation, and eventually hopes to become a lead spacecraft designer. Recently, Elijah began an internship with ASRC Federal Holding Company, an organization providing solutions and mission support for both governmental and civilian agencies. His position is in communications and data handling, and he looks forward to learning more about the astronautical industry through this opportunity. "I just want to do something that is

making a difference for the future of spaceflight and exploration," he muses.

Elijah credits much of his inspiration and passion for astronautical engineering to the professors and peers who have worked alongside him at Capitol. Professors Rishabh Maharaja, Marcel Mabson, Conrad Schiff, Ryan Schrenk, Charles Conner, and Jeff Volosin all had a significant impact on Elijah's educational experience, helping him work through engineering challenges and instilling the skills needed to manage the simulation software in the SFOTC and the prototyping tools in the Fusion Lab. Professors Liam Williams and Zane Harvey also helped Elijah to grasp concepts in areas that he had limited knowledge in, such as electronics and coding.



When asked about advice he would give the next generation of Capitol students, Elijah says the key is to never give up and to always maintain the drive to learn more. "Keep that curious spark that makes you want to pursue these degrees in the first place, and you'll make it through the challenges," he encourages. He also stresses the importance of keeping a close social circle and leaning on the friends you make for support and motivation. "Almost everyone I've met along my academic career are also driven individuals, and surrounding yourself with honest friends both in academics and clubs/extracurriculars builds everyone up. It may take a village, but we can find a way or make one."

Donor Honor Roll

July 1, 2022 – June 30, 2023

Capitol Technology University appreciates the support of the following alumni, families, foundations, businesses, and organizations during our last fiscal year. We deeply appreciate your generosity.

Trustee's Society (\$6,000 and up)

Lockheed Martin Services, Inc.
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Laura M. Dugan
Karen DaRocha
Tollefsen Family
Colridge Chestnut
Henry Costa
Tania R. Bonsall

If you would like to be recognized on the Capitol Tech Honor Roll, please see the next page for a list of ways you can have an immediate impact on the work of the university and on the lives of our students.

Looking for Ways to Make an Impact?

There are many ways you can help Capitol Tech give students the best possible start to their career. However you choose to support the university – through a direct gift, tribute gift, or leaving a bequest in your will – you will be making a real difference to the university and in the lives of our students.



Honor a Loved One

Remember and/or honor loved ones by supporting Capitol Tech. Each honoree or next of kin will receive a personalized card letting them know of your thoughtful gift.

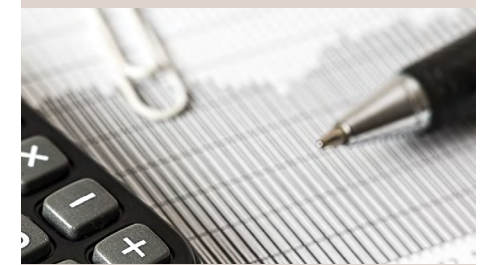
Make a tribute gift at,
www.captechu.edu/tribute



Gift of Securities

You may choose to support Capitol Tech by donating gifts of stock or appreciated securities. In addition to providing Capitol Tech with vital financial support, you can save on capital gains taxation on your appreciated securities.

For more information, contact:
Melinda Bunnell-Rhyne
mabunnell-rhyne@captechu.edu



IRA Rollover/Distribution

You can make a direct transfer to Capitol Tech of a Qualified Charitable Distribution from your IRA – a great way to get tax-deferred IRA savings while supporting Capitol Technology University.

For more information, contact:
Melinda Bunnell-Rhyne
mabunnell-rhyne@captechu.edu



Matching Gifts Program

Many of our region's employers participate in a matching gift program, meaning your company will match the contributions that you donate to Capitol Tech.

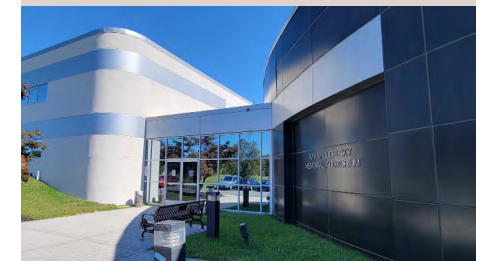
Ask your Human Resources department for details.



Donate Your Time

Want to help us plan and execute future on-campus activities for our students and community? Volunteer your time and work with us on one of our upcoming events.

Contact Melinda Bunnell-Rhyne at
mabunnell-rhyne@captechu.edu to learn about current volunteer opportunities.



Leave a Legacy

With your continued support, we can ensure the best education for students for years to come.

Discover the charitable gift that's right for you by contacting Melinda Bunnell-Rhyne
mabunnell-rhyne@captechu.edu

Make a direct gift at: www.captechu.edu/support

Over the Summer

Capitol Tech had an exciting cyber summer with a convention appearance and the kick-off of a new summer program.



DEF CON 31

This summer, Capitol Tech attended DEF CON for its 31st annual convention. DEF CON is the world's largest cyber convention and draws in thousands of attendees, companies, and vendors from around the world who are dedicated to everything cyber. Our booth had a lot of great, exclusive offerings this year, including our custom-made DEF CON 31 Badge. The DEF CON convention badge has evolved greatly over the past 10 years, developing from a simple, plastic ID card to a complex piece of hardware. Capitol Tech's own students created an impressive version of this badge in the form of an Electronic Signal Detection Device. The hardware consisted of a meticulously planned integration of a 3D-printed motherboard, soldered circuitry, and a speaker that emitted a static alert when the device was near an electronic source like a Wi-Fi router or cell phone. This device wasn't just a cool collectible — it helped show the ingenuity of our engineering students, as well as the importance of cybersecurity awareness in an increasingly digitally-surveilled world.

Capitol Cyber Sleuths + GenCyber Program

Monday, July 17 marked the kick-off of our Capitol Cyber Sleuths program. This two-week summer program is tailored for K-12 educators and teachers who want to further their knowledge in the cyber field, so that they can pass this learning onto their students. It was established in collaboration with GenCyber, a National Security Agency (NSA) initiative to increase awareness and diversity within the K-12 curriculum to make cybersecurity education accessible for all students and teachers. Our mutual goal is to develop the next generation of cyber professionals and address the workforce shortage in this field.

The benefits of the Capitol Cyber Sleuths program are receiving the foundational knowledge and tools for teaching cyber topics in the classroom, as well as how to engage younger audiences with this information. Each program participant received a cyber toolkit for hands-on learning, including a Raspberry Pi, USB flash drive, and the Sleuth Kit: Autopsy Forensics software. Sessions were taught online, with the option to come on-campus.

Dr. Kellep Charles, Dr. Bill Butler, Dr. Rick Hansen, and Sirina Sucklal are the program coordinators who helped bring this experience to reality. We had a successful summer session, with over 35 participants who received certificates of completion and a stipend at the end of their training.



These teachers will go on to implement what they learned from this program within their classrooms, leading their students to success in the cyber platform, preparing them for careers in our growing technology industries.

For more information on how to sign up for next year's session, visit captechu.edu/summer-programs.

Under Construction: New Laboratory Renovations Coming in Fall of 2024

The technology landscape greatly evolves every year, bringing new knowledge, methods, and equipment to the industry. Capitol Tech aims to remain at the cutting edge of this advancement by providing students access to faculty experts, industry-standard equipment, and collaborative makerspaces. These unique resources ensure that our students receive the most relevant, real-world experiences in our classrooms and labs which mirror those they will encounter in the field. In fact, many students say our labs are a primary reason they chose our university!

After thorough review, we have assessed even better ways to meet the needs of our students and the work being done in these labs, as well as break ground for new centers of excellence. The idea is to create safe, inspiring, fully accessible, and reconfigurable lab areas with more mobility, flexibility, and modernization, serving multi-functionality, enhancing the student experience, and impacting the recruitment and retention of top robotics and engineering students. Many of our programs are cross-related, and creating collaborative makerspaces for our students to work together and move their projects to the next stage of completion is always a top priority.

The total cost of the lab renovation project will be \$4.1 million. A grant proposal for \$1.75 million was approved by the State of Maryland, with the support of the Maryland Independent College & University Association (MICUA).

Capitol is expected to match this grant amount and contribute the additional funds needed to fulfill the renovations and new equipment required at a total of \$2.35 million.

The enhanced lab spaces will be equipped with "plug-and-play" research equipment, movable workbenches, technical upgrades, ergonomic features, enhanced lighting, and multiple access points for utilities such as networking connections, power cables, and wireless capabilities. New equipment and design elements will range from interactive SMART boards, glass panel views, mobile furniture, wireless tech, virtual reality areas, storage spaces for devices and cable management, and more!

Currently, this project is at the conceptual stage, where aesthetics and logistics are being planned with contracted architects. Construction is expected to begin in May 2024 and proceed over the summer months until completion in September 2024. With our McGowan Building being a newer addition to our campus, all affected areas of construction will be located in our MCI Building only. The renovated labs include our Robotics Lab, Unmanned & Autonomous Systems Lab, Electrical Engineering Lab, and Computer Science Lab. During the renovation, structural changes will be made including the removal of some walls, flooring, and windows, as well as the hallway lockers, to allow for the expansion of existing labs.

Below are a few concept design highlights of the exciting improvements coming to our campus by Fall of 2024!



Unmanned & Autonomous Systems Lab

Our UAS Lab will be upgraded with glass paneled walls, mobile workstations, and advanced equipment, including our new addition—The Flight Simulation Lab—which will be located within the UAS Lab and will provide a virtual reality learning experience for students in our Aviation Professional Pilot degree program.



Electrical Engineering Lab

In our EE Lab, students will see improvements to the workbench furniture, storage and organizational space, and visibility.

Alumni Spotlight: Liam Williams



Capitol Tech is proud to have some of the nation's most accomplished alumni. Whether they go on to work at a large corporation, enter academia, or start a business of their own, all of our graduates are valuable, permanent assets to the Capitol Community. Liam Williams is no exception, and his dedication to Capitol is particularly notable. Liam graduated with his Bachelor's in 2022, his Master's in 2023, and is now pursuing his PhD. But that's not all — Liam is now known around campus as Professor Williams, as he returned to Capitol in 2022 to teach the next generation of technology leaders. We learn more about Liam's accomplishments so far in this exclusive interview.

Q: When did you graduate and what was your major at Capitol?

I received my Bachelor of Science in Electronics Engineering Technology in April of 2022, and Master of Science in Engineering Technology in August of 2023.

Q: What have you been doing since graduation?

I have been working as a Digital Systems Engineer for Clarity Cyber, specializing in secure systems design and evaluation, as well as teaching as an Adjunct Professor for Capitol Technology University, specializing in Engineering Technologies.

Q: How did you decide to return to Capitol to teach? What made you want to?

Dr. Conner, Chair of the engineering department, asked if I'd be interested in coming back and teaching courses that I did extremely well in now that I was using those skills in the industry. I believed that I knew ways to make a positive outsized impact on the student learning experience, so I wanted to make a difference to the current students.

Q: What courses do you currently teach? Do you hope/plan to take on any additional ones in the future?

EL-204 — Digital Electronics, and EL-262 — Microprocessors and Microassembly. I intend on doing the same as well as EE-362 — Microcontroller System Design, next semester, and in the past I've taught EE-354 — Digital Design II, and EE-309 — Circuit Design and Simulation.

Q: What has been the biggest adjustment for you in the move from attending Capitol as a student to teaching others as a faculty member?

Getting to know and regularly work with many of the Capitol staff that previously I had never interacted with. Now I interact with many of them almost weekly, either as part of regular faculty duties or initiatives to

improve the student experience.

Q: Do you work any other jobs in addition to teaching? Can you discuss your roles if so?

I am still presently working as a Digital Systems Engineer at Clarity Cyber, where I am currently developing libraries and applications intended to be used to validate that network security standards are being met.

Q: What is the best part of teaching for you? And what is the most challenging?

The best part is getting to see students learn and grow as they succeed in their coursework. The most challenging, for me, is when a student starts to fall behind due to not being able to put in the requisite effort, either due to stress or other external factors.

Q: Do you plan to pursue teaching in the long run?

I plan to teach at least for as long as I can make an impact on the quality of student education and their learning experience, which I hope to be as long as the rest of my career.

Want to Learn More About Liam?

Read an extended edition of this interview by scanning the QR code below or visiting our website at capl.ink/40tUVnG



Faculty Spotlight: Dr. Najam Hassan



Dr. Najam Hassan is the new Department Chair of Computer and Data Science at Capitol Technology University. He brings his impressive 35 years of experience in the industry to his classroom, teaching computer and data science and artificial intelligence (AI), as well as business analytics, big data, and project management.

In this interview, Dr. Hassan offers insight into how he came to Capitol Tech and what exciting things are expected for the future of computer science.

Q: Can you tell us a little about yourself, how you got into computer science, and what you find exciting about this field of study?

My journey into computer science began right out of high school, when I was introduced to the fascinating world of programming and problem-solving. I had a Commodore 64 computer with 64 KB RAM, which was considered a lot back in the 80's.

I learned to program in BASIC using the manual that came with the computer. The ability to create software and algorithms that can impact our daily lives has always intrigued me.

What I find most exciting about computer science is its ever-evolving nature as a field that never stands still, with new technologies, paradigms, and possibilities emerging constantly. This dynamism keeps me motivated to explore the latest advancements in data science, artificial intelligence, and other cutting-edge technologies. I believe that computer science is not just about coding — it is about solving real-world problems and pushing the boundaries of what's possible in an increasingly digital and interconnected world. This is a field that empowers us to make a difference and shape the future.

Q: Can you give insight into your research and publications over the years?

Throughout my research and publications, I have maintained a consistent focus on the ethical and societal implications of emerging technologies and am passionate about fostering a deep understanding of, and contributing to, the valuable insights of these critical conversations in the field.

My doctoral research delved into the utilization of visual summarization tools in conjunction with e-books to enhance the learning process among students. This study employed a quantitative approach and concluded that while such tools offer significant benefits in improving comprehension and retention, they may also pose challenges, with some students perceiving them as distractions during e-book reading.

In addition, I have had the privilege of contributing to two notable publications. The first explored the programming ethics of self-driving cars, highlighting the ethical dilemmas faced in rare accident scenarios and the need for a comprehensive examination of the ethical considerations for rapidly evolving technologies. The second delved into the ethical dimensions of a ransomware attack on Medstar Health, critically analyzing the event, Medstar's response, and the vulnerabilities that were exploited, and offering ethical position statements to mitigate future attacks.

Q: What inspired you to join Capitol Tech for this position?

My decision to join Capitol Tech was motivated by a strong alignment between the university's mission and my professional interests, especially in the domains of data science and AI. Capitol Tech's commitment to excellence in technology education and its rich history of preparing students for successful careers in various technology-related fields stood out to me. I believe the power of education can transform lives, and Capitol Tech's mission deeply resonated with me.

Want to Learn More About Dr. Hassan?

Read an extended edition of this interview by scanning the QR code below or visiting our website at capl.ink/3QqBTty



On-Campus Events: Fall 2023

Capitol Tech hosted numerous exciting on-campus events and activities this semester that allowed students to connect with their community and move towards their personal and professional goals. Here are some highlights!



Career Fair & Conference

The Fall 2023 Career Fair and Conference were held on campus on Friday, October 13, and featured a diverse variety of industry employers who met with eager students seeking jobs and internships. The sharply-dressed students' first stop of the day was the auditorium, where they attended the Career Conference and listened to presentations about proper etiquette, professional dress, and resume development. Then it was off to McGowan, where the students got to meet employers face-to-face and share their accomplishments while receiving valuable feedback.

Among the organizations in attendance were General Dynamics Mission Systems, Baker Concrete, Motorola Solutions, Infotrend Incorporated, and plenty of other well-known companies within the technology sector. Several members of the Capitol community even exhibited with their workplace at the fair, with alumnus Michael Crank representing his employer Sealing Tech and student Rebekah Ericson representing the Space Telescope Science Institute, where she currently interns.



Club & Organization Fair

Students gathered under the breezeway on August 31 for the Fall 2023 Club & Organization Fair and back-to-school cookout. Club representatives worked hard to create eye-catching and interactive table exhibits to encourage peers to join groups such as Music Ensemble, Astronomy club, Robotics club, Creative Juices, Underwater Friends, Athletic club, and lots more. Students also had the opportunity to learn about academic organizations such as the Signal-9 cyber competition team and S-LAB student government. Campus was abuzz with lively students trying out remote control robots, peering through telescopes, and chatting with club presidents about what each group had to offer. Attendees were also treated to a delicious barbecue and got to enjoy socializing with friends and catching up over burgers and cold sodas.



TechSustenance Grocery Giveaway

On August 27, Capitol senior Nelson Alvarez hosted a successful food drive on campus in partnership with Forwardly Impacting Today (FIT), a non-profit organization founded by a former Capitol student. The organization's

mission is to support young adult students by promoting wellness and working collaboratively with colleges and universities.

Each year, FIT awards a scholarship to a student who must then complete a wellness initiative related to a global problem that they are passionate about. Upon being picked as the scholarship recipient, Nelson chose to host a grocery giveaway to address hunger and food insecurity. After months of planning, he distributed a total of 72 bags of food to Capitol students in need. The event not only provided Capitol students with essential grocery items, but also introduced them to FIT and its mission, allowing them the opportunity to apply for a scholarship of their own.



CapTech Connect!

On select Fridays during the semester, Capitol hosts groups of local high schoolers in order to introduce them to the type of projects they would work on as Capitol Tech students. The groups arrive by bus in the morning and spend the day moving through stations that not only show off all the best aspects of a Capitol education, but allow students to get involved through hands-on participation.

Throughout their visit, they explore the cybersecurity lab to learn how hackers can infiltrate computer systems, meet with robotics faculty to build their own mini robots, check out the state-of-the-art esports arena to exercise their competitive side, and participate in many other interactive activities such as Cahoot games and rocket launches. The CapTech Connect! program also includes a campus tour and informational presentation from the Admissions department and student ambassadors.

Upcoming Events



Undergrad Virtual Open Houses:

For more information and dates, please visit capl.ink/undergrad-voh or scan the QR code on the left.



Master's Virtual Open Houses:

Offered Monthly. For more information and dates, please visit capl.ink/3KIHDSb or scan the QR code on the left.



Doctoral Virtual Open Houses:

Offered Monthly. For more information and dates, please visit capl.ink/3N8zHGG or scan the QR code on the left.

Data Governance and Compliance in the Ubiquitous Digital World with Dr. Diane M. Janosek

Thursday, December 14, 12:00 p.m. (Eastern)



Cap Tech Talks: Webinars

Offered Monthly. To watch past webinars ON DEMAND, visit bit.ly/3a7J4zP or scan the QR code on the left.

SAVE THE DATE!

Accepted Student's Day
Saturday, March 16, 2024

STEM Challenge Day
Saturday, April 6, 2024

100 Year Founder's Day Celebration
Saturday, October 9, 2027

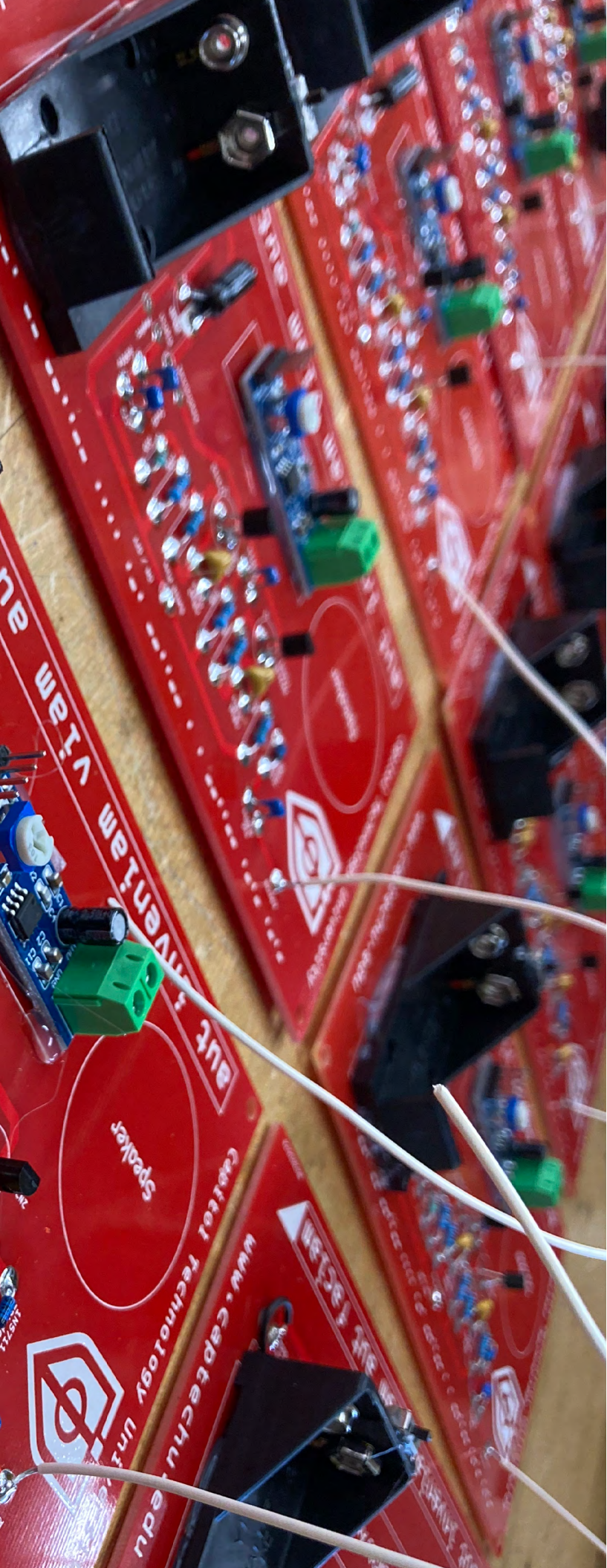
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