

CAPITOL CHRONICLE



LEADING THE CHARGE TOWARD THE FUTURE

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In this time of extreme change, Capitol Tech reflects on a past leader, our current student leaders, and the charge toward the future.

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Capitol Tech created several online events available to the campus, local, and global community to participate in including several webinar series led by industry experts.



A MESSAGE FROM THE PRESIDENT

During this difficult year of transition and uncertainty, our university has not only maintained its high standard for education, but has also taken on leadership roles in many of our fields of study. Even at a distance, Capitol Technology University has remained steadfast in our educational aspirations, connected with our members, and persistent in our goals.

Together, students, faculty, and staff have continued to excel despite the virus' outbreak. In this issue's *Meet our Experts* section you will learn about our new webinar series' we launched this past summer. To date these webinars, have over 1,700 views. In this issue you'll also learn about the university's latest external recognition as the new Northeast Regional Hub for Cybersecurity and the new and exciting partnerships we've forged to provide increased opportunities for current and future students.

During the 2020-21 academic year we will continue to enhance our educational offerings, expand our competitive teams, and launch online bachelor's degrees designed to meet the evolving workforce needs. None of these accomplishments and future endeavors would be possible without the support of the members of the Capitol Tech community—our faculty, staff, students, and alumni.



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PAST, PRESENT & FUTURE

LIFELONG SUPPORTER OF CAPITOL TECH PASSES

Earlier this year, Dr. H. Judith Jarrell, an eternal supporter of the university and pillar of this community passed on May 12, 2020 at 84 years old, nearly 30 years of which she spent working at Capitol Tech in a variety of roles spanning from Librarian to Director of Development to Vice President for Institutional Advancement. Throughout her time at Capitol Tech, Dr. Jarrell worked on projects that had far-reaching benefits for prospective students, current students, and alumni.

Dr. Jarrell worked tirelessly to establish numerous scholarships and implement programs to identify and retain underrepresented groups.

Thanks to Dr. Jarrell, the institution's first capital campaign, which created



the current Laurel campus, raised \$3.8 million, \$300,000 over its goal; obtained several federal grants under Title III and Title VIII to expand the development of

career and academic programs; and raised \$3 million for the renovation and expansion of the John G. and Beverly A. Puente Library through a generous donation from Trustee Emeritus John Puente and his wife Beverly. Between 1978 and 2003 she raised more than \$16 million with the support of the Board of Trustees.

Donations are welcome to the Leonard and H. Judith Jarrell Memorial Scholarship, originally established by Judy at the time of her husband's death. If you wish to contribute to the fund contact advancement@captechu.edu.



CHARGER MASCOT RETURNS TO LEAD CHARGE TOWARD THE FUTURE

After years of his absence, Capitol Tech's official mascot is back! The Charger returned this year to lead Capitol Tech's charge toward the future for a new generation of Capitol Tech students and alumni.

Initially the Charger cheered on the Capitol Tech basketball team for years,

but disappeared when the program disbanded. Despite the disappearance of the Charger, our students remained driven and competitive which resulted in the university's successful competitive teams, such as cyber battle and robotics teams.

Now, that our Charger is back,

these teams and the university's next competitive endeavor, an electronic sports team expected to launch in 2021, can look forward to the support of the mascot.

More information on E-sports will be forthcoming, but for now, help us welcome back the Capitol Tech Charger!



Capitol Tech Charger
Mascot Reveal



Asst. Director of eSports
and Competitive Play
joins the team



Clinic and intramural
league play begins
virtually



Ribbon cutting for
physical location



SEPTEMBER 2020

JANUARY 2021

MARCH 2021

SEPTEMBER 2021

STUDENT AMBASSADORS HELP LAUNCH CAPITOL CONNECTIONS ONLINE

Due to COVID-19 we have been unable to conduct our normal in-person recruiting and open house events, however in true Capitol Tech fashion when we couldn't find a way, we made one. To provide prospective students and families opportunities to interact with faculty, staff, and students we have created *Capitol Connections Online*, a virtual hub for information sessions, events, and more.

Our student ambassadors are a critical part of our normal recruiting. Typically, student ambassadors assist with recruiting events and conduct tours and lab demonstrations during open house events where we often hear parents say, "I am so glad that my son/daughter has finally found their tribe". So it makes sense that our student ambassadors are a critical part of Capitol Connections Online. Student ambassadors have hosted Take Over Thursdays on Instagram and have developed YouTube videos about their Capitol Tech experience.



Meet Chekinah Louise Wese Djeukou, an ambassador and BS in Software Engineering student, and Xenia Escobar a BS student majoring in Computer Engineering and minoring in Cybersecurity.

Chekinah says her favorite thing about Capitol Tech is "that everything is hands on...from my first semester at Capitol I started coding."



Xenia says "I am one of few Latinas in the engineering field, because the engineering field isn't very diverse. Capitol on the other hand, is not just becoming more diverse, it is diverse."

NEW DEGREES IN 2020

BACHELOR'S

**Construction IT and Cybersecurity
Professional Trades Administration**

MASTER'S

Product Management

DOCTORAL

**Counterterrorism
Cybersecurity Leadership
Quantum Computing
Operational Technology**

These programs are all offered online.

AWARDS & RECOGNITIONS

BEST CYBER HIGHER ED PROGRAM

Capitol Tech was announced as the winner of the prestigious SC Media Award for Best Cybersecurity Higher Education Program on February 25, 2020.

SC Media, a company dedicated to cybersecurity since 1989, cited Capitol Tech's numerous cybersecurity degrees, dedication to the employability of students, innovative programs, hands-on teaching methods, and deeply rooted relationships with government entities as some of the reasons the university stood out as the winner.

"Capitol is honored to be recognized with this award," said Dr. Sims. "Our cybersecurity faculty has worked diligently to intertwine their experiences working as experts in the field and the latest technology into the cybersecurity program to graduate technically advanced and innovative students who embody Capitol's motto of "find a way or make one."

SC Media's rigorous nomination and review process, culminated on February 25 in San Francisco with the SC Awards dinner, which SC Media dubs a celebration of "the best the



cybersecurity community has to offer." The dinner convenes "thought leading professionals, innovative companies and powerful products and services named as finalists for the 2020 SC Awards," according to its website.

Capitol Tech was a finalist for this award along with University of Maryland Global Campus, New York University, New York University Tandon School of Engineering, and Red Rocks Community College.

The university continually strengthens its reputation as a consistent

supplier of qualified employees by graduating students and numerous accolades awarded to the university have also built its reputation as a launching pad for cybersecurity leaders. In addition to the SC Award, Capitol was selected to train NSA new-hires in master's-level courses, has been selected as a Military Friendly® School for the 2020-2021 academic year and multiple years prior, and is designated a National Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency (NSA) and Department of Defense (DoD).

REGIONAL HUB FOR CYBERSECURITY

In addition to being named a National CAE-CD, Capitol Tech has been awarded a two-year grant from NSA to lead the National Center of Academic Excellence Northeast Regional Hub, which includes 14 states, the District of Columbia, and hundreds of institutions offering cybersecurity programs. This distinction bestowed to the university echoes the importance of the university's longstanding dedication to cybersecurity education, active leadership roles within the region, and ever-expanding global reach.

"Capitol Tech has positioned itself as a cybersecurity leader not only by developing one of the first Information Assurance degrees in the United States, but also through years of working with government agencies such as the NSA and the DoD as well as government defense contractors," said Dr. Sims. "We have the expert faculty, the infrastructure, and the drive to assist fellow cybersecurity-oriented university's in the US's northeast region under the shared goal of defending the nation from cybersecurity threats."

To aid in the goals outlined in the grant, Capitol Tech, Mohawk Valley Community College (MVCC), and Towson University (TU), formed the CAE Northeast Regional Hub Leadership Consortium to provide regional leadership to the over 90 CAE institutions, non-CAE institutions, employers, and regionally focused not-for-profits in this area. Through this grant, Capitol Tech and its two partner institutions will support national efforts within the region and foster cybersecurity education, research, and collaborations among CAE institutions and federal partners regionally and nationally.



Dr. William Butler, Chair of Cybersecurity

Dr. William Butler, Capitol Tech's Chair of Cybersecurity, will serve as the primary Principal Investigator (PI). Dr. Butler serves as a CAE mentor with 4 mentees already designated and 3 more in development. He regularly attends and presents at CAE community meetings and is PI for three current DoD Cyber Scholarship Program (CySP) scholars. Over the past five years, Dr. Butler has also mentored 25 scholars enrolled in the National Science Foundation (NSF) Scholarships in Science, Technology, Engineering, and Mathematics Program (S-STEM) program, 4 of whom are currently enrolled. Dr. Butler also volunteered for the CAE- Cyber Defense Education (CDE) pilot program and works extensively with 2-year schools throughout the region to develop pathways to employment for Associate of Applied Science (AAS) graduates. Professor Jake Mihevc from MVCC and Dr. Sidd Kaza and Dr. Blair Taylor from TU will serve as Co-PIs.

"As a professional who dedicated his life to working in and educating students in the field of cyber, I am extremely excited by the possibilities this position will afford not only students at Capitol

Tech, but students across the East coast," said Dr. Butler. "As an individual I have prepared myself for cyber leadership roles for years, as has Capitol Technology University. After decades of building cybersecurity programs, mentoring students, and creating a pathway from community college to 4-year university to in-demand career, Capitol Tech has proven it is ready to do even more for the cyber community."

FACULTY LEADERS:

DR. ALEX ANTUNES & DR. ROBERT STEELE



Dr. Alex Antunes

Dr. Alex "Sandy" Antunes, Professor of Astronautical Engineering (AE) talks about program's recent accomplishments including the Space Flight Operations Training Center's (SFOTC) recent grant and the upcoming NASA sponsored launch of Cactus-1, a foot-long CubeSat built by Capitol Tech students spanning departments.

How did you receive the recent award made to the SFOTC by the Maryland Space Grant Consortium (MDSGC)?

Adjunct Professor Marcel Mabson was just awarded research funding, in a competitive proposal process, to fund students to evolve our SFOTC. The MDSGC funding is used to support student-centric research, which is a great fit for us. This MDSGC support will be used to make the lab hybrid, not just on-ground. Students will be able to operate and interact with a mix of on-ground and remote-access analysis in pursuit of their research projects. So the natural step was for us to team up and send in our competitive grant for funding. And we won—it was awarded!

What does this grant mean for the SFOTC?

The SFOTC has always been about next generation training for spacecraft operations, and Marcel's vision is to never keep it static. So the money will go to virtualize the lab, not just in response to COVID-19 lab access, but as the direction all labs should move—because the industry is becoming more virtual, more remote, more autonomous. This grant gives our students a head start on the competition.

Could you please describe the planning behind the CACTUS-1 spacecraft launch with Virgin Orbit this December?

One thing I love about our AE program is how many alums come back to teach and to mentor the latest 'crop' of students. AE is always evolving because we are so connected with the space industry, via alums and our adjuncts and our industry supporters. Those sort of cross-connections are essential to provide what we do for our students.

To get CACTUS-1 'off the ground' took 2.5 years and over 30 Capitol students. Capitol AE students punch above their weight class in terms of projects, both capstones and when they launch via High Altitude Balloons (HABs) and Wallops sounding rockets. The CACTUS-1 CubeSat is the next step higher.

To get the launch, we had to write

a highly competitive proposal for evaluation by the National Aeronautics and Space Administration (NASA) CubeSat Launch Initiative (CSLI). And again, we won, it was awarded! To be one of only 14 universities nationwide that were awarded a free launch opportunity is not just a chance for students to design and build hardware that will fly in space, but helps put Capitol on the map.

After being awarded the launch, the students then had to do the labor of actually designing, building and testing their CubeSat. That's where the '2.5 years and 30+ students' came into play.

What opportunities does a project like the CACTUS-1 launch provide students?

For a student to walk into a job interview and say "oh, by the way, I've built hardware that's currently flying in space" is a powerful argument for hiring them. Showcasing projects like CACTUS-1 are necessary for not just our best and brightest, but our rising students as well. Most undergraduates have a 1-2 semester research 'lifespan' before they move on to jobs or other projects, so the CACTUS-1 work got to reach a lot of students across multiple majors over a few semesters each, and a few core students over its entire project length. And, multiple students got to attend conferences to present posters and talks on their CubeSat work,





Dr. Robert Steele

Dr. Robert Steele, Chair and Professor of the Computer Science Department at Capitol Tech, talks about department's current educational efforts and future. Dr. Steele oversees Bachelor's degrees in Computer Science, Data Science, Computer Engineering, Information Technology, Computer Engineering Technology, and BS Software Engineering and a Master's degree in Computer Science.

What is your vision and goals for the Computer Science Department?

There is currently a jobs boom in Computer Science (CS) and the jobs boom in Artificial Intelligence is part of that. With roles such as Machine Learning Engineer, Full-stack Developer, Data Scientist and Data Engineer all commanding national average base salaries in the range of \$100,000 to \$150,000 or more, this reflects that the real current shortage is that we do not have enough highly-skilled CS graduates. The demand for graduates with strong Computer Science, Data Science, and Computer Engineering skills in the US will be higher now, than at any previous point in history.

The vision for the Computer Science Department is to enable students to understand what a ready ladder of opportunity these fields currently offer, to assist all our students succeed in these fields, and to help bring any student with

the necessary determination, ambition and creativity to a point where they are able to contribute at the very cutting-edge of this innovation revolution through industry opportunities and applied research exposure. The Computer Science Department with its applied focus in these areas at this particular time is simply in the "right place at the right time"! It can make a significant contribution to the industry and public sector transformations occurring now. The goal is to close the loop between incoming raw talent and the exciting technological changes and innovations now before us. The key goals are rapidly building our student body and building further close links with our surrounding partner organizations and employers.

How do the courses offered by the Computer Science Department prepare students for their future careers?

Since commencing as Department Chair, I have undertaken significant curriculum change at both the

set is applicable to and will transform all sectors of the economy in the next decade—the "big picture" if you like. Whether it is Amazon's HQ2 in the Washington area, the DoD's Joint Artificial Intelligence Center, or the use of predictive modeling in any and all industry sectors such as health, finance, defense, or social media, there are huge opportunities.

All of the Department's programs are all specifically designed to move graduates towards these opportunities.

What else would you like people to know about the Department?

Many of our great professors bring current industry practice and experience to the classroom. The close intermingling between the Department and current practice provides an ability for the Department to more rapidly seize upon and adapt to the innovation opportunities in the field than almost any competitor—it is a very favorable dynamic for both our students and our partners.

The demand for graduates with strong Computer Science, Data Science, and Computer Engineering skills will be higher now, than at any previous point in history.

undergraduate and graduate levels. The curriculum reflects the most in-demand skill sets and is designed to take students from the very basics of knowledge to be well prepared to participate in the career paths mentioned above. Our Industry Advisory Board now reflects a number of the key employers looking for talent and leading innovation in these areas.

How do the topics you presented on during your webinar in the Impact of Emerging Technology on Society series relate to the courses offered by Capitol Tech?

In some regards I did discuss the current "Jobs Boom in Artificial Intelligence", but also explained how the relevant Computer Science skill

ALUMNI LEADERS:

MARK FEARER & KIERRA JILES

Mark Fearer, a 2020 Doctor of Science in Cybersecurity graduate, is taking his passion for education and, in particular, the education he received from Capitol Tech, to a new level by reinvigorating the university's Alumni Association.

—This is Mark's story—

I have been a member of the D.C. chapter of Information Systems Security Association (ISSA) since 2012, and they are involved with mentoring undergraduates. I mentored at least three undergraduates at Capitol, and in doing so visited the campus. That is when I discovered the school had something to offer me, as well.

Graduating as a doctor brought a feeling of accomplishment and it distinguishes me in my role as an information security audit manager.

I want to give back to my alma-mater, and Capitol Tech is such a renowned regional tech presence, I want to remain connected and give back what it takes to continue this for the students that come behind me. I want to keep sharing the knowledge and the wealth.

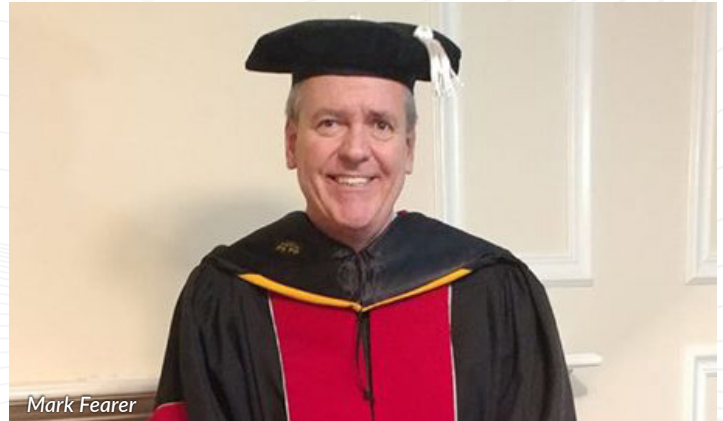
When inducted with the doctorate in August, I got a sudden jolt of self-confidence. I felt like, 'don't stop, just keep going and keep giving back'.

Are you interested in joining the Leadership of The Capitol Technology University Alumni Association?

CONTACT CapTechAlumni@captechu.edu

The Association is currently looking for alumni to serve on the Leadership Council of the Alumni Advisory Association. The Council will meet quarterly to identify ways for the Association to fulfill its mission and provide opportunities for alumni to engage with current students. Members of the Leadership Council will serve for 2 to 4 years to help build momentum and sustainability. The Leadership Council is expected to hold its first meeting in February 2021 via Zoom.

The Association will also hold an all members, honorary members, and friends of the Association meeting via teleconference in March 2021. Save the date emails with a link to RSVP will be sent in January.



Mark Fearer

At this time, there are no dues to be a member of the Alumni Association. However, we ask that you register as a lifetime member of the Alumni Association.

The Association will encourage alumni to support the university by promoting contributions to the Annual Fund which is used to support current operations, establishing a scholarship to support future students, or joining Mark as a member of the Legacy Society.

Mark, the inaugural member of the Legacy Society, joined by including Capitol Tech in a bequest. This vehicle of giving back to the Charger Community ensures Mark can have a hands-on impact on the university outside of a monetary gift. Mark is looking forward to working with Melinda Bunnell-Rhyne, the Vice President of Student Engagement and University Development, and talking with other alumni about how they can join the Legacy Society through a planned gift that will meet their current personal financial goals and their desire to have philanthropic impact on the university.

BECOME A MEMBER OF THE ALUMNI ASSOCIATION:

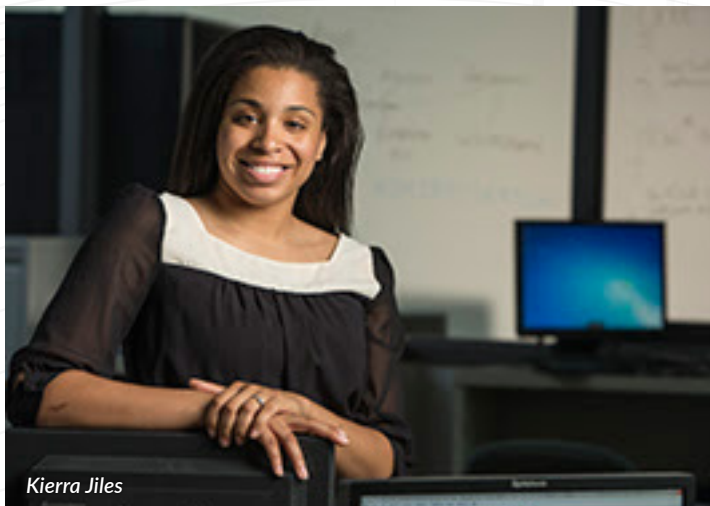


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Kierra Jiles

Kierra Jiles, a 2017 graduate of the Bachelor's in Cyber and Information Security program, knew she wanted to be a hacker in 7th grade. She became even more focused on cybersecurity when her high school teacher introduced her to ethical computer hacking to test security measures called white hat hacking. Today, she's a Site Reliability Engineer at Microsoft with previous experience in software and computer engineering for top government agencies including the U.S. Department of State, NASA, and the Central Intelligence Agency (CIA).

—This is Kierra's story—

A STEM-education designed to build expertise

"On one of our final exams, we had to code on the spot. You had to write code on paper for one part, and then write it on the computer for the other," Kierra explains. This is a skill that makes her feel confident in job interviews. "I start smiling if they ask me to code on the whiteboard, which kind of throws them off a little bit and reassures them."

Kierra adds that Capitol Tech professors gave her opportunities to be creative by encouraging students to explore new avenues to solving problems, rather than focusing on the answer being just right. "There have been times where I've had a completely wrong answer on a final, but I got an A+ just because the teacher appreciated the thought behind how I got to my answer and the techniques in the coding—not necessarily the answer itself."

"All the tools we used in our cybersecurity courses were relevant to what we'd be doing in the real world," says Kierra—adding that she had a few professors who had students share weekly current events with the class. Many Capitol Tech professors are also working professionals, bringing up-to-the-minute knowledge to courses. Kierra adds this made a difference when applying for jobs because Capitol Tech cybersecurity professors emphasize "different techniques and tools that make us more attractive [to employers] in that field."

Experience that goes beyond the classroom

During her time at Capitol Tech, Kierra worked on a number of cutting-edge cybersecurity projects with Dr. Bill Butler, Chair of the university's SC Media Award-winning Cyber and Information Security Department and Director of the Center for Cybersecurity Research and Analysis (CCRA). Kierra spent a semester working with Dr. Butler and two other Capitol Tech students to test a company's antivirus software.

"We would load viruses on a tablet and run them to see how many times the company's antivirus software would run warnings and then compare this to others," said Kierra, who also worked on a side project working with facial recognition software requested by Dr. Butler. "It was facial recognition to unlock the door to your office. We were trying to figure out the set up and how to best ensure a secure environment."

Capitol Tech professors were dedicated to helping Kierra build her career in cybersecurity. She credits Dr. Butler for introducing her to NASA and another one of her Capitol Tech professors for introducing her to the CIA. Kierra describes her CIA interview process as nerve-wracking. "I was sure I'd tanked the first interview," she says, but eight months later she was offered a second interview. Four months later, the CIA offered her a job.

"I'm still constantly getting job interviews and opportunities even when I'm not looking."

A career driven by passion

"I just love coding. I'll go into work early and I can just code until late into the evening," says Kierra. She adds that it's wonderful to feel confident in her coding skills and that she has room for professional growth in the field of cybersecurity.

What's next for Kierra Jiles? Right now, in addition to her cybersecurity career, she's raising her 2-year-old daughter, Kori. "She actually has a computer that she bangs on while I'm coding," Kierra says. But for the future, "eventually I'd want to become a professor, create my own app, stuff like that." I'm still constantly getting job interviews and opportunities even when I'm not looking. It's nice to have that job security—to know I'm still wanted in the career force and that's strictly because of my degree and the skills that my Capitol Tech education provided me with."

STUDENT LEADERS: TAYLOR, LEIF, & LUDMILA

"I went from being a complete amateur in cybersecurity to the Digital Forensics Lab Student Lead, a lead member of Signal-9, a professional educator for the NSA's Cryptologic Museum, and being connected and accepted by multiple federal agencies and private sector corporations for internships."

Taylor Ownbey, is a Junior majoring in Cyber & Information Security.

—This is Taylor's story—

Growing up, STEM of any kind wasn't my main focus or interest. Ever since elementary school, I excelled in English and visual arts. When it came time to look at colleges and future plans, I began to explore other options, namely the field of criminal justice. Doing something to help everyone else just seemed right; I could not imagine myself working a job where I don't make a difference. I had a new goal in mind: the Federal Bureau of Investigation (FBI). Until I received some news in the middle of high school. The diagnosis just came in: a spinal disease that only worsens, and disqualifies me from any and all federal jobs that require physical activity. To say I was crushed would be an understatement.

I was not going to give up helping people that easily, even if my own body tried to stop me. Looking at other options for my future, I ended up joining a small local sector of Girls Who Code. This club only covered basic programming concepts, but I fell in love with technology immediately. I devoted all of my time to self-teaching myself any and all tech concepts I could get my hands on. Throughout this journey, scouring the internet for resources, I stumbled across free educational modules for cybersecurity. This was a field I had never considered prior, and I began to wonder why. It fit the bill for a federal job I had used to want, it will change the world for the better and help people, and it is tech.

Going to a university for cybersecurity was an incredible leap of faith. Everything I learned was self-taught. I jumped right into all major-related courses. I was new to the field and did not



Taylor Ownbey

know everything, but it didn't matter. I wanted to learn, and I was being given every opportunity to do so.

I went from being a complete amateur in cybersecurity to the Digital Forensics Lab Student Lead, a lead member of Signal-9, a professional educator for the NSA's Cryptologic Museum, and being connected and accepted by multiple federal agencies and private sector corporations for internships. I was set back by so many factors, but I couldn't let anything I can't control stop me. I am still not a genius, not an expert, not the best. But I don't have to be. Initiative and a desire to learn anything and everything is all I needed, and it is all I still need.

"Within my first week, I was already writing code and doing what I loved."

Leif Heaney is a recent graduate of the BS in Computer Science, a current student in the MS in Computer Science program, and the university's Assistant Director of Online Learning and User Experience.

—This is Leif's story—

After committing to Capitol Tech, my freshman year was an incredible experience. Within my first week, I was already writing code and doing what I loved. Many of my courses were pragmatic in the fact that the course work was essentially exposure-learning. Students are put in an emulation of real-life



scenarios where learning was reinforced with examples from faculty who had previously (or currently) worked in the industry. I had an industry professional at my disposal every day of the week.

My sophomore year was met with challenges, both personal and educational. I lost a close family member, underwent a surgery mid-semester, and then had another surgery the week after final exams. Educationally, I had been met with some difficult courses and a large course load that left me little time to work. Through all of these complications and unpredictable situations, one thing remained constant: the support from the faculty, staff, and students at Capitol Tech. My instructors were incredibly understanding and helped me find an individualized study plan that allowed me to stay up-to-date with my course load while grieving and recovering from surgery. My instructors adjusted group projects to allow me to work asynchronously to not impede upon my erratic personal schedule. Everything that I needed was provided to me in a consistent and heartfelt manner. It made me see just how much the faculty and staff at Capitol Tech cared about each student and their education.

Over my four years as an undergraduate at Capitol, I worked on many projects, both individually and in a group. Even though I was in a Computer Science degree program, I received a wealth of knowledge in related fields through labs in both my general studies and degree-focused courses. My favorite project was my senior design project, the *Capitol Technology University Disc Golf Course Companion Application*. The project lasted the entirety of my senior year and was essentially an emulation of the process taken when pitching, designing, implementing, and successfully completing a project within a work environment. I was given the opportunity to creatively brainstorm, create a pitch and presentation, design and development the entirety of the project, and then implement it onto a system of my choosing. The entire process gave me a greater understanding of what to expect once I was ready to enter the work force.

"It is time for diversity and inclusion"

"It is time for diversity and inclusion" Ludmila Morozova-Buss, is an international student enrolled in the Combination Program PhD in Technology with Master of Science in Research Methods. Ludmila was named the 2020 "Cybersecurity Woman of the Year" in the Influencer category by voters in a worldwide online contest hosted by the Cybersecurity Accelerator Program. She actively inspires knowledge sharing and cybersecurity awareness and education. To-date, Ludmila's *Raise the Cybersecurity Curtain* eBook reached a network of one million followers.

—This is Ludmila's story—

I advocate a Systems Thinking approach to informing readers, followers, friends, and business associates on digital transformation, emerging technologies, and cybersecurity. Systems thinking forever changed the way I think about the world and approach issues.

The technologies of tomorrow are at the heart of our daily life and work. Concurrently, you cannot teach understanding,



you construct it. Now is the time for calm, rational, holistic planning, and methodical action. It is time for diversity and inclusion. Time for emerging technologies to create and add positive values in societies and bring a return on capital and human capital invested globally. Time to embrace Augmented and Artificial Intelligence solving humanity's most burning problems. Time for women to step on the dance floor of emerging technologies and cybersecurity industries. Reskilling is a great issue.

Inclusion is as important as innovation. We will have to go into learning mode, be willing to be taught, by each other and by the systems, keeping in mind and making sure that trust, security, and ethics in technology is essential in the decades to come.

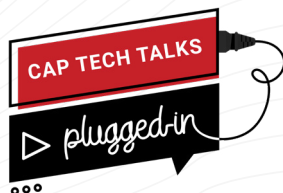
ACCESS TO OUR EXPERTS:

As the world was forced to become remote, Capitol Tech utilized its existing infrastructure to provide the Capitol Tech, the local, and the global tech communities access to the university's vast network of industry experts. To this end, Capitol Tech launched four independent webinar series this year: The Impact of Emerging Technology on Society; Cap Tech Talks; Cap Tech Talks: Plugged-in; and Cyber Challenges in the Pandemic.

The *Impact of Emerging Technology on Society* series, launched in partnership with the Baltimore Sun, reached over 100,000 people to invite them to the series' four live webinars. The series focused on topics including cybersecurity's role in space tech and the role of machine learning in emerging computing systems.



The university also reinvigorated its *Cap Tech Talks* series, focused on providing content to working professionals, and created a spin-off series titled *Cap Tech Talks: Plugged-in*, which provided high school students a place to ask questions and receive information about future career options.



Also focused on reaching high school students, was the *Cyber Challenges in the Pandemic*, created by Capitol Tech in collaboration with the National Security Agency (NSA), Anne Arundel Community College (AACC), Frederick Community College (FCC), and Prince George's Community College (PGCC). This series focused on informing high school and college students about the importance of cyber security, hygiene, and preparedness.



While three of the four series' have ended, the Cap Tech Talks series continues with a special webinar titled *The Future of Technology and Education* hosted by Haden Land, Chairman of the Board of Trustees, on **January 15, 2021 from Noon-1 p.m.**



REGISTER FOR THE CHAIRMAN OF THE BOARD'S WEBINAR AT: bit.ly/CapTechTalks

View previous webinars and other original content on Capitol Tech's YouTube channel: youtube.com/c/CapitolTechnologyUniversity

NEW PARTNERSHIPS & PATHWAYS

ESTABLISHING WICYS CIC

This year, Capitol Tech helped launch the Women in Cybersecurity Critical Infrastructure Community (WiCyS CIC). This offshoot of the national Women in Cybersecurity (WiCyS) organization, aims to support the recruitment, retention, and advancement of women in cybersecurity critical infrastructure (CI), so they are positive agents of change.

"Critical infrastructure is one of the fastest growing fields in our country, and cybersecurity underpins every one of the 16 CI sectors. Women make up a key part of this industry but are an underrepresented minority," said Diane Janosek, President of the WiCyS Mid-Atlantic Affiliate and NSA Commandant of the National Cryptologic School. "The CIC is formed to empower women in cyber CI and create a safe community for women to flourish, explore, and learn."

The new community was envisioned by Janosek, with support from Dr. Sims.

For more information about the group, visit www.womenci.org.



MOUS

To further increase the opportunities afforded to Capitol Tech students and to increase access to the university's education, Capitol Tech entered into a variety of Memorandum of Understandings (MOU) with institutions around the globe.

For instance, an MOU with Columbia Southern University (CSU) allows graduates of CSU's Master's in Occupational Safety and Health degree direct admission into Capitol Tech's PhD in Occupational Health and Safety. Credits earned by students through CSU's Master's degree will transfer toward Capitol Tech's fully online, research-based PhD.



Capitol Tech also signed an MOU with the University of Liberia (UL), located in Monrovia, Liberia.

Through this international public-private Agreement, Capitol Tech will assist UL with academic development, support UL stakeholder programs, and provide professional development for UL faculty members. Together, Capitol Tech and UL will participate in a faculty and student exchange program.



"Through these MOUs and the many other agreements we have penned this year, Capitol Tech will build upon the robust education provided by these institutions to students seeking expanded knowledge, real-world experience, and a next-level degree in their growing field," said Dr. Sims.



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