

TNTech acm

75TH YEAR OF
ACM: SPECIAL
EDITION
NEWSLETTER

TABLE OF CONTENTS

75th Year of ACM

- 2 75th Year of ACM
- 2 Trivia

Chapter Information

- 3 ACM Semester Events

Spotlights

- 4 Faculty Spotlight
- 5 Faculty Spotlight
- 5 Member Spotlight
- 6 Club Spotlight

ACM News

- 7 SIG Highlight
- 7 ACM Publication



Association for
Computing Machinery

Advancing Computing as a Science & Profession



75TH YEAR OF ACM

by Kashaina Nucum

ACM was founded in 1947 for researchers to connect with "Mathematical and computational advances for calculating machinery." Since then, ACM has grown to nearly 100,000 members and now is the world's largest scientific and educational computing society.

ACM's 75th Anniversary Celebration will be held as a special conference in San Francisco June 10, 2022 with a day of panels filled with world-leading scholars discussing the future of computing in topics including markets and incentives, humans and AI, connections at scale, trust and risk. and global societal challenges

To celebrate their 75th year, ACM is posting on social media about their history, their influence, and people's involvement in ACM. Click on of the social media links below to check them out



[ACM- Association for Computer Machinery](#)



[@TheOfficialACM](#)



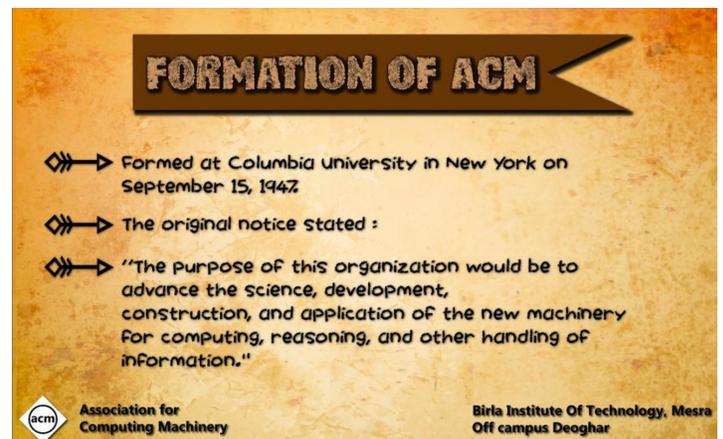
[@theofficialacm](#)

Trivia!

13 papers were presented at the first ACM conference in December 1947, covering the cutting-edge topics of that time. Which of the following topics was NOT presented there?

- a) Adaptation of the ENIAC
- b) Keyword Spotting
- c) Doppler Observations
- d) Census & Computing

Answer is on the bottom right of the next page



Source: @TheOfficialACM on Twitter

ACM Events

04/19	SIG Quantum Meeting	11 am - 12 pm	Bruner 228
04/26	Final/Election Meeting	11 am - 12 pm	Bruner 228
04/27	Interview Speaker	6 pm - 7pm	Bruner 119

You can access a link to our calendar [here](#)



ICPC Meetings

04/20 6:00 pm - 8:00 pm

You can access a link to our calendar [here](#) and members are sent an Outlook calendar invite.

SIGHPC Meetings

04/18 6:00 pm - 8:00 pm

You can access a link to our calendar [here](#) and members are sent an Outlook calendar invite.

Activity	Start Date	End Date
Team formation contest 1	2022-02-02	2022-02-08
Mathematics lecture: bitwise seive and modular arithmetic	2022-02-09	2022-02-09
Team formation contest 2	2022-02-12	2022-02-12
Team Registration	2022-02-12	2022-02-14
Mathematics lecture: probability	2022-02-16	2022-02-16
ICPC Contest preparation	2022-03-02	2022-03-02
ICPC Contest	2022-03-05	2022-03-05
Data structure lecture: linked list	2022-03-23	2022-03-23
Data structure lecture: stack	2022-04-06	2022-04-06
Data structure lecture: queue	2022-04-20	2022-04-20



Trivia answer: B

Faculty Highlight

Cyril Focht

Cyril Focht is a professor at Tennessee Tech University. His work largely focuses on software studies and game design/game studies. Software studies utilizes critical lenses from the humanities to understand computing artifacts and processes and analyzes things like social impacts of technology. Game studies revolves around how the operations of a game's system affect its interpretation. His most recent research has been based on how choice mechanics in interactive fiction and narrative games convey significance other than simple cause and effect. He's broadly interested in areas where computing intersects with the humanities and arts.

Focht states he grew up wanting to make games. Although he applied to MFA (Masters of fine arts) programs related to game design, one of the programs forwarded his application to a new MS program in computational media, which has a focus on broadly interdisciplinary approaches to computing, and he was accepted into this program and earned a degree. While his focus was in game studies, he continued to pursue software studies since the stakes of that field are so much higher in our present cultural context. He states, "*We're making a lot of really fast advancements in what we're able to use computing technology to do and as a culture we put a lot of emphasis on training people to be able to make more things, all the pushes toward STEM education are a part of that, but we don't value the critical skills necessary to understand the impacts of the technology being built and the people who do have those skills are largely ignored when they point out the detriments of that technology.*"

After he graduated with a Bachelor's degree, Focht immediately went to grad school here at Tennessee Tech. He worked some seasonal jobs at summer camps with the scouts and at Philmont, which is a big private nature reserve in northern New Mexico that offers one-to-two weeks long backpacking treks for high school aged youth. After finishing grad school, he spent a year driving around the country, living out of my truck, and started working on a handful of creative projects including small experimental games, hypertext poetry, and a nonfiction book on software studies, most of which are still in the works. He also worked as an SI leader for 1300 as a Tech student, and most of the work he did for my summer jobs was teaching. As a faculty member here at Tech he taught two semesters as an adjunct and started teaching full-time last semester.

His favorite parts of teaching are when he gets to work with students individually. He loves to see those "lightbulb moments" when a confusing concept clicks. The realization is even better when Focht can see the excitement on their faces.

He advises students to consider the benefit of a broad education. He believes general education classes are the most important in an undergraduate curriculum since it exposes students to different ways of thinking. Focht also suggests:

Pursue what's interesting to you, don't just chase whatever you think will make the most money if you don't enjoy what you're doing, you will always be surprised at which skills turn out to be useful. I have friends with backgrounds in theater, fiber arts (weaving/knitting), poetry, archival, and other seemingly unrelated areas who regularly use those skills in their software jobs. I have a cousin who is a very successful aerospace engineer, and she often points out that the most useful class she took as a student was on flower arranging. Something a most people don't realize about liberal arts degrees, the ones that make you ask "how are you going to use that?" like English and history, is that even though they aren't likely to find work in their field, they are the most likely majors to find full-time employment straight out of school. That's because the critical skills they gain from those studies are so broadly applicable. This isn't a pitch for you to change your major, but do consider adding a minor or even a double-major if there's another field you're interested in!



Staff Highlight

Eric Brown

Eric Brown is currently the Assistant Director for the Cybersecurity Education, Research & Outreach Center at Tennessee Tech University. In the past, he taught introduction to programming, Linux literacy, software engineering, systems administration programming, introduction to cyber and privacy, information and data storage management and IT security. He loves the classroom and teaching and expresses, "The students are what makes the job enjoyable. Without them, there is no life in the buildings and programs. I think that this is why the classroom is my favorite place on campus." Additionally, he is also a Certified Scrum Product Owner and Certified Scrum Master, in which Scrum is an Agile software development framework.

He joined the Computer Science department in August 1994 as a systems administrator for the department's single computer lab until he left the department in February 2013 as an Information and Instructional Technology Specialist and Adjunct Faculty. Then, he worked for the Tennessee Department of Education in the Chief Information Officer's office serving as a district solutions advocate where he worked with the technology directors in 147 school districts across the state and was responsible for the state's K12 E-rate program. He returned to Tennessee Tech in March 2016 to join CEROC as assistant director.

He thinks the events that he enjoys the most are also the ones that are the most exhausting. He enjoys the campus events where middle and high school students visit to better understand the different majors, attend a competition, or go through specialized camp.

He offers advice to students:

Take the opportunity to explore the student organizations within the department and across campus. The holistic college experience is more than just being in the classroom, reading a book, and taking a test. Develop those professional networks now that will last beyond the memory of that shiny piece of paper. It will be through those networks that you will grow a career.

I was blessed to have some scholarship support for my time as a student at TNTech. I worked my butt off to keep my grades where they needed to be. In all of that work, I neglected to participate in part of the other campus activities and grow that early professional network. While good grades are quite important, don't let life pass you by while staring at a number.



Member Highlight

Gary Williams

Gary Williams is a sophomore Computer Science student with a concentration in Data Science. His favorite class so far has been Introduction to Computer Science and Problem Solving with Prof. April Crockett. In addition to ACM, he is involved in Cyber Security, Game Development Club, and Data Science League. He wishes there were more of him, and he states, "There are so many exciting things at this school that I would love to do, but I do not have the time."

Once he graduates he would love to become a software developer. He has served in United States Marine Corps and United States Air Force. Additionally, he likes to fish largemouth bass.

He enjoys Computer Science because it provides a sense and satisfaction of creativity. He feels like an artist, and when he writes a program and it compiles, he feels proud for creating something unique. He expresses, "Oh yeah, some else can do the same thing for now. But is their thought process and the way they wrote their codes the same as mine. No! Therefore, it is my own creation."



Club Spotlight

CyberEagles

CyberEagles is a cyber security organization that focuses on sharing the intelligence of Tech's cyber students to help them gain skills and experiences that will prepare them for their industry workforce on day one. Members attend conferences such as CPTC, CCDC, Cyber Force, NCL, and President Zachariah Threet urges students to get involved.

Threet states,

Learning and experiencing the opportunities that exist on campus to advance your cyber career today, while participating and being supported by a committee of likeminded people.

If you are interested in joining CyberEagles, their large group meetings are bi-weekly on Thursdays during dead hour. Additionally, they have small interest groups that meet on Tuesday and Thursday evenings.



Robots Rise to Meet the Challenge for Old People

by Kashaina Nucum

One nursing home resident stated her quality of life decreased due to pressure from resource-intensity and commitment to be enthusiastic was challenging. Her grandson, Conor McGinn, worked part time as a teenager in her nursing home and saw these troubles. As an engineering student at Trinity College Dublin, he sought to utilize technology to assist senior living.

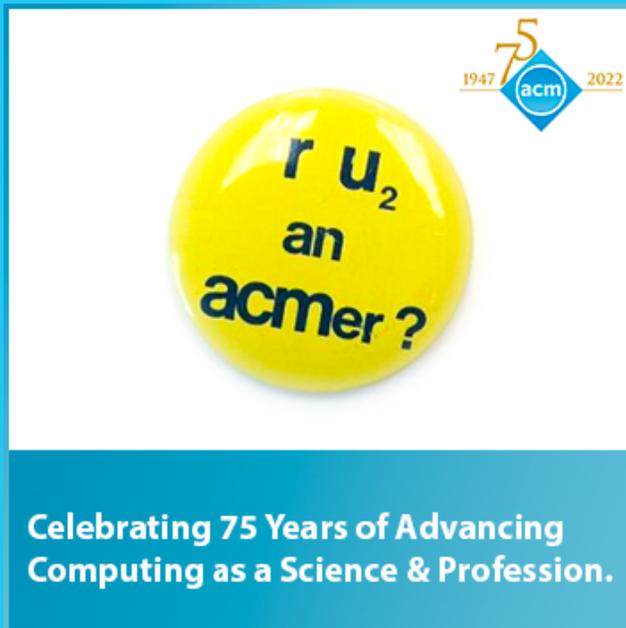
There is a large need for automated support, especially since there are more than 1 billion people over 60 years old, and the World Health Organization predicts this number will rise to 1.4 billion in 2030. This would require an additional 6 million nurses.

With his own experience seeing nursing homes and the need for automated support in the future, McGinn and his colleagues constructed a cartoon-looking robot named Stevie. Stevie conducted some entertainment activities, such as calling bingo and leading a sing-along. This allowed staff to attend to the senior citizens' individual things. Furthermore, Stevie can do things many caregivers are unable to, such as displaying subtitles or speaking in different languages.

McGinn does not intend for the robot to replace caregivers but "to augment how people care for people." Although Stevie can talk to residents or play games with them, these required a controllers. McGinn hopes to give Stevie Alexa-like abilities, although this may be tricky.

Despite the challenges of automated robots, researchers are continue to work on robots that can assist senior citizens, such as by helping them dress. There is so much potential to robotic caregivers.

You can read more here.



Celebrating 75 Years of Advancing Computing as a Science & Profession.

Source: @theofficialacm on Instagram

SIGCSE: Special Interest Group on Computer Science Education

by Kashaina Nucum

[Special Interest Group on Computer Science Education (SIGCSE) provides a worldwide forum for teachers and faculty to discuss practice and research relating to teaching and learning computing and the creation, implementation, and evaluation of computing curricula, courses, and program at all levels of education.

They will host ITiCSE 2022: Innovation and Technology in Computer Science Education from July 8-13, 2022 in Dublin, Ireland.

QR Codes

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Membership Form



Have any thoughts on additions or changes to the newsletter?

Want to help develop the newsletter?

Email knucum43@tntech.edu!

