

## Program Offerings

Welcome to the Department of Mathematics, Computer Science and Engineering Technology (MCSET) at Elizabeth City State University. The Department offers undergraduate programs leading to a Bachelor of Science degrees in both Mathematics, Accelerated BS/MS in Mathematics, Computer Science (concentrations in Data Science and Computer Information Systems) and Engineering Technology (concentrations in Computer Networking, Electrical and Computer, Mechanical and Robotics and Autonomous System Engineering Technology). The Department also offers a Master of Science degree in Mathematics (concentrations in Applied Mathematics, Community College Teaching, Mathematics Education and Remote Sensing).

## Special Thanks & Committee Members

- Academic Affairs
- Kuldeep Rawat
- MCSET Faculty Members
- Kenneth L. Jones
- Jacinta Dillard
- Johnny L. Houston

## Department of Mathematics, Computer Science and Engineering Technology

### *5<sup>th</sup> Annual Johnny L. Houston Lecture Series*



### *Speakers:*

**Dr. Kaushik Roy** - Associate Professor and Interim Chair in the Department of Computer Science North Carolina A&T State University (NCA&T)

**Dr. Sayed Mostafa** - Assistant Professor of Statistics North Carolina A&T State University (NCA&T)

**Dr. Mohamed Elbakary** - Associate Professor of Electrical and Computer Engineering Elizabeth City State University (ECSU)

Thursday March 24, 2022, 3:30-5p.m. ET

**Virtual (Zoom) Meeting**

## *Program*

**Welcome.....Dr. Julian Allagan**

**Occasion..... Dr. Kuldeep Rawat**

**Introduction of Speaker.....Bay Brian**

**Lecture.....Dr. Kaushik Roy**

*“Intrusion Detection for IoT-based Smart Environment using a  
Lightweight Deep Learning Model”*

**Introduction of Speaker..... Lashaunda Gary**

**Lecture..... Dr. Sayed Mostafa**

*“Preparing Students for the Data Science Era through Introductory  
Statistics: A Proposed Model”*  
”

**Introduction of Speaker..... Benny Baker**

**Lecture..... Dr. Mohamed Elbakary**

*“Shadow in Computer Vision: An Overview and Perspective”*  
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**Closing Remark..... Dr. Johnny Houston**

*Prizes will be awarded in-between speakers*

## **Department of Mathematics, Computer Science & Engineering Technology**

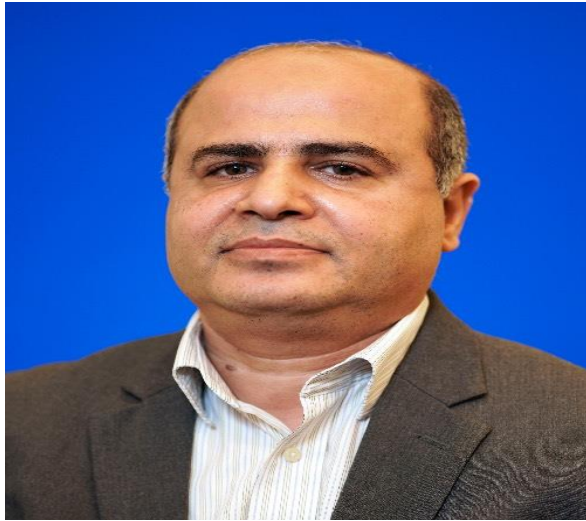
Farrah J. Ward	Professor of Mathematics and Provost and Vice Chancellor for Academic Affairs
Kuldeep Rawat	Professor of Engineering Technology and Dean of School of Science, Aviation, Health and Technology
Julian D. Allagan	Chair and Associate Professor of Mathematics
Kenneth Jones	Professor of Mathematics and Program Coordinator for BS and MS in Mathematics
Akbar Eslami	Professor of Engineering Technology and Program Coordinator for BS in Engineering Technology
Malcolm Dcosta	Associate Professor of Computer Science and Program Coordinator for BS in Computer Science
Mehran Elahi	Professor of Engineering Technology
Mohamed Elbakary	Associate Professor of Computer Science and Engineering Technology
Hanif Talukder	Associate Professor of Mathematics
Bijandra Kumar	Assistant Professor of Engineering Technology
Usha Kulkarni	Lecturer in Mathematics
Shatoya Covert	Lecturer in Mathematics
Jashaun Peele	Lecturer in Mathematics
Dipendra Sengupta	Professor of Mathematics
Krishna Kulkarni	Professor of Mathematics
Antonio Rook	Adjunct in Computer Science and Director of MSEN Program
Jacinta Dillard	Administrative Associate
Johnny Houston	Professor Emeritus in Mathematics and Computer Science
Linda Hayden	Professor Emeritus in Mathematics and Computer Science



Dr. Kaushik Roy is an Associate Professor and Interim Chair in the Department of Computer Science at North Carolina A&T State University (NCAT). His current research is heavily focused on cybersecurity, cyber identity, biometrics, machine learning (deep learning), data science, cyber physical systems, and big data analytics. He has over 140 publications including 33 journal articles and a book. Dr. Roy has been the PI on \$4.5M and Co-PI on \$5M in research grants funded by the National Science Foundation (NSF), Department of Defense (DoD), National Security Agency (NSA), and Department of Energy (DoE). Dr. Roy is a director of the Center for Cyber Defense (CCD). Dr. Roy also directs the Cyber Defense and AI lab.

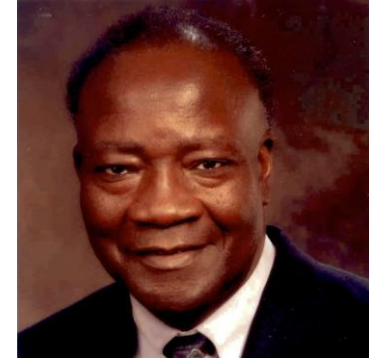


Dr. Sayed Mostafa is an Assistant Professor of Statistics in the Department of Mathematics & Statistics at North Carolina A&T State University (NCA&T). He received his B.S. in Statistics from Cairo University, Egypt, in 2010, and his M.S. and Ph.D. from Oklahoma State University in 2016. Prior to joining NCA&T in Fall of 2018, he spent two years as a Visiting Assistant Professor in the Department of Statistics at Indiana University. His research interests are focused on the design and analysis of sample surveys, survey data integration, nonparametric curve fitting, resampling methods, and statistics and data science education. His research is supported by grants from the U.S. National Science Foundation (NSF). He recently served as a reviewer on multiple NSF review panels and as a referee for many statistical journals including the Canadian Journal of Statistics and the ASA's Journal of Statistics & Data Science Education.



Dr. Mohamed Elbakary is an Associate Professor of Electrical and Computer Engineering in the Mathematics, Computer Science, and Technology department since August 2020. Dr. Elbakary taught at Old Dominion University and the University of South Alabama for several years. He worked on research projects funded by DARPA, NASA, NIH, DoT, and Industry. He got his masters in automatic control in 1996 from Mansoura University and his Ph.D. in Electrical and Computer Engineering from the University of Arizona in 2005.

His research interests are computer vision, image processing, artificial intelligence, and machine learning. His research applications include automatic target detection and tracking systems, smart systems (e.g., robotics, unmanned aerial vehicles, and smart cars), medical diagnosis, and monitoring and recognition systems.



Johnny L. Houston, Educator, Mathematician, Researcher, International Specialist, Professor Emeritus – ECSU and Executive Sec. Emeritus – NAM, earned three degrees in mathematics: B.A., Morehouse College 1964; M.S., Clark Atlanta University, 1966; and the Ph.D., Purdue University, 1974. He also studied mathematics for a year at L'Universite de Strasbourg in France. For several Scientific National Labs, he worked as a Computational Scientist. Dr. Houston joined ECSU as Vice Chancellor of Academic Affairs in 1984 and retired from ECSU as Senior Research Professor in Mathematics and Computer Science in 2010.

For a quarter of a century (1975-2000), he served as the first Executive Secretary of the National Association of Mathematicians – NAM. Dr. Houston received over 15 million dollars in grants to implement scholarly activities, scientific programs, student training/support programs and to develop and provide textbooks for schools in the country of Senegal in West Africa. Additionally, at ECSU, Dr. Houston developed the first Advanced Computing Lab (ACL) in Lester Hall, the first African American Studies Programs (TLMP), The Computational Science – Scientific Visualization Center (CSSV Center) in Lester/Lane Halls, the Global Education Center in the Gilchrist Complex and he was the Founder of ECSU's Global Leadership Academy which provided support for many ECSU students to travel abroad. Dr. Houston has received many awards and recognitions for his contributions, including NAM's Lifetime Achievement Award (1999), Purdue University BBC Pioneer Award (2009), invited to The White House for a State Dinner (2008) and he was recognized nationally in 2013 as a Science History Maker.

In 2015, Dr. Houston began the establishment of a **JOHNNY L. HOUSTON MATHEMATICAL SCIENCES SUPPORT FUND** that will provide the Department \$2,000.00 annual for the next 25 years, being effective 2016.