NORTH CAROLINA STATE UNIVERSITY

FALL DIPLOMA CEREMONY

DEPARTMENT of COMPUTER SCIENCE

Friday, December 10, 2021

**James T. Valvano Arena inside
William Neal Reynolds Coliseum**

3:30 P.M.

Welcome

Welcome to the Fall diploma ceremony of the Department of Computer Science at North Carolina State University, Raleigh. The department was formed in 1967 and is one of the oldest in the nation. The department currently has over 2,180 students. We are among the top in the nation in the number of awarded bachelor's, master's, and doctoral degrees in computer science, and we lead in both teaching and research accomplishments. We continue our tradition of excellence by proudly honoring a new group of graduates.

The ceremony today recognizes the academic achievements of the Fall 2021 graduating students receiving bachelor's, master's, or doctoral degrees in the field of computer science. It is a very special, auspicious, and exciting day for all of us -- students, their families and friends, and our faculty and staff, that culminates years of hard work and dedication for all concerned. Students graduating today bring the number of our alumni to over 10,000.

On behalf of the faculty and staff, I would like to thank you for coming, and to extend our warmest congratulations to the students, their families, and their friends.

With best wishes,
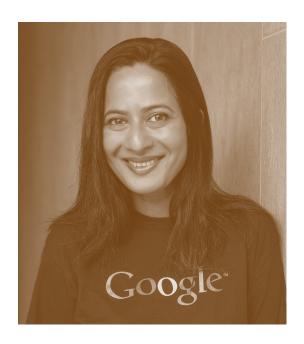
Gregg Rothermel
Department Head

FALL DIPLOMA CEREMONY
James T. Valvano Arena inside William Neal Reynolds Coliseum
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Pre-Processional Comments.............…..…........Ken Tate
Director of Engagement and External Relations

Processional...…..Pomp and Circumstance
Sir Edward Elgar

Welcome...Gregg Rothermel, Ph.D.
Department Head

Speaker ....…............Kamala Subramaniam
Google Engineering Site Lead, Durham, North Carolina

Introduction of Honor Students....................................Barbara Jasmine Adams, Ph.D.
Director of Undergraduate Advising

Student Speakers...Shalini Balagopal and Ryan Catalfu

Presentation of Degrees ....George Rouskas, Ph.D.
Director of Graduate Programs

Sarah Heckman, Ph.D.
Director of Undergraduate Programs

Gregg Rothermel, Ph.D.
Department Head

Recessional...…........Triumphal March From Aida
Giuseppe Verdi

Kamala Subramaniam is currently the Google Engineering Site Lead, at Durham, North Carolina, responsible for growing Google Cloud's presence in North Carolina and building an ecosystem of academia, the industry, and the local communities. Kamala's focus is on research, scientific discovery, and technological advancement, all with a keen focus on diversity and inclusion.

Kamala began her career at Google in 2016 in the Bay Area where she was an engineering leader for Google's infrastructure networks. Kamala works on the scalability, efficiency, and reliability of all of Google's networks - Data Center Networks, B4 private datacenter networks, B2 internet facing WAN, and the Cloud Network. Her experience is in building strongly performant engineering teams that work on large scale distributed systems that are geographically distributed. Kamala is also the Diversity & Inclusion leader for Google Networking, passionate about hiring and growing underrepresented talent in her organizations.

She received both an M.S. in ECE and a Ph.D. in Computer Networking from North Carolina State University. Kamala serves on NC State's Computer Science Strategic Advisory Board (SAB).

COMPUTER SCIENCE DEGREES

Doctor of Philosophy

A Doctor of Philosophy (Ph.D.) is the highest academic degree an individual can earn. In addition to completing coursework specified by the advisory committee (54 or more credits beyond the master of science), Ph.D. students must demonstrate breadth of knowledge, pass a series of examinations, and defend a substantial and original scholarly dissertation.

Master of Science

The Master of Science (M.S.) is a traditional research-oriented degree. Master of Science graduates have successfully completed advanced coursework in computer science. Students with thesis titles below their name have written and defended a thesis summarizing their supervised research.

Master of Science in Computer Networking

Master of Science in Computer Networking (MSCN) graduates have successfully completed advanced coursework in computer networking. Students with thesis titles below their name have written and defended a thesis summarizing their supervised research.

Master of Computer Science

The Master of Computer Science (MCS) program is a professional degree program designed primarily to meet the needs of industry. Master of Computer Science graduates have successfully completed advanced coursework in computer science.

Bachelor of Science

The Bachelor of Science (B.S.) degree is conferred upon students who have successfully completed a program of study including both general coursework in the humanities, social sciences, mathematics, and physical sciences as well as specialized courses in computer science.

DOCTOR of PHILOSOPHY

RUTH OLUWADAMILOLA AKINTUNDE

Dissertation: *Learning Analytics for Data-Informed Interventions in Blended Classrooms*

Committee Chair: Tiffany Barnes, Ph.D.

Ruth Akintunde was born and grew up in Lagos, a big city in Nigeria. She graduated top of her class with a B.S. degree from the University of Lagos, Nigeria in 2011. Before graduate school, Ruth worked for 4 years as a software developer and mobile applications team lead. Ruth is the recipient of numerous scholarship awards from organizations such as Google and NCWIT.

She missed doing research and studying for exams, so in 2016 she decided to pursue her M.S. and Ph.D. studies in Computer Science at NC State. For her Ph.D. thesis, she designed and implemented PEDI - Piazza Explorer Dashboard for Intervention, an actionable analytics platform for help-seeking forums.

Upon completing her Ph.D., she joined SAS Institute as a Machine Learning Developer.

On the personal side, Ruth is happily married and the Mom of two beautiful girls. One fun fact about Ruth: she wrote her first accepted publication while she was also delivering her 2nd child!

DOCTOR of PHILOSOPHY

CHRIS BROWN

Dissertation: *Digital Nudges for Encouraging Developer Behavior*

Committee Chair: Christopher Parnin, Ph.D.

Dwayne Christian Brown, Jr. ("Chris") grew up in Rock Hill, SC. He received his B.S. degree in Computer Science with Distinction from Duke University in 2013. After working 2 years as a Python Developer at Bank of America, Chris decided to pursue his graduate studies in Computer Science at NC State.

His doctoral research explored ways to improve the behavior of software engineers by integrating concepts from behavioral science, such as *nudge theory*, into bots and automated recommendation systems. He received his M.S. degree in 2017 and his Ph.D. in April 2021 from NC State, under the direction of Dr. Chris Parnin in the `alt-code` research lab.

In August 2021, Chris joined the Department of Computer Science at Virginia Tech as an Assistant Professor. He leads a research group focused on studying the behavior, productivity, and decision-making of software engineers and teaches software engineering-related courses at VT.

DOCTOR of PHILOSOPHY

JOHANNE TEX CHRISTENSEN

Dissertation: *Richly Communicative Systems for Machine Learning Training*

Committee Chair: Benjamin Watson, Ph.D.

Johanne Christensen was born and grew up in Houston, Texas. She received her B.A. in English-Creative Writing from the University of Houston in 2006.

She moved to Raleigh, NC in 2011 to pursue her Ph.D. in Computer Science at NC State. Her research focused on the intersection of user experience and artificial intelligence.

Outside of research, she enjoys writing.

DOCTOR of PHILOSOPHY

YIHUAN DONG

Dissertation: *Promoting and Studying Teacher Engagement and Novice Student Behavior in Block-Based Programming Environments*

Committee Chair: Tiffany Barnes, Ph.D.

Yihuan Dong was born and raised in a small coastal city in Liaoning, China. He received his B.E. degree from Dalian University of Technology in 2014 and moved to Raleigh, NC that year to pursue his Ph.D. degree at NC State. His research focused on helping K-12 students learn to program in STEM classrooms effectively through block-based programming environments.

Upon completing his Ph.D., Yihuan joined the IXL Learning as a Software Engineer and continued his passion in developing learning technologies for young learners.

Aside from working, Yihuan's hobby is being an automobile mechanic.

DOCTOR of PHILOSOPHY

EFFAT FARHANA

Dissertation: *Science Reading Behavior of Middle School Students within a Digital Literacy Platform*

Committee Chair: Collin Lynch, Ph.D.

Effat Farhana received her B.S. degree in Computer Science and Engineering from Bangladesh University of Engineering and Technology in 2011. She moved to Raleigh, NC in 2015 to pursue her Ph.D. degree in Computer Science at NC State, working with Dr. Collin Lynch in the ArgLab research group.

Her research focuses on mining educational software to derive data-driven heuristics and designing interpretable machine learning algorithms. In recognition of her work, she was selected for Rising Star in Data Science in January 2021, organized by the Center for Data and Computing (CDAC), at the University of Chicago.

Upon completing her Ph.D., she joined Vanderbilt University as a Postdoctoral Research Scholar working in an educational game project aimed at kids on the autism spectrum.

In her free time, she likes reading books, traveling, and window shopping.

DOCTOR of PHILOSOPHY

ANIRUDH GANJI

Dissertation: *Network Performance Analysis of IoT, Cloud and Mobile Systems*

Committee Chair: Muhammad Shahzad, Ph.D.

Anirudh Ganji was born in Visakhapatnam, India, in 1993.

He received his B.S. degree in Electrical, Electronics and Communications Engineering from the Indian Institute of Technology, in Kharagpur, in 2014. He received his Ph.D. in Computer Science from NC State in 2021.

Upon completing his Ph.D., Anirudh joined Microsoft in June 2021 as a Software Engineer.

DOCTOR of PHILOSOPHY

HUI GUO

Dissertation: *Informative Events and Stories in Text Related to Software Development*

Committee Chair: Munindar Singh, Ph.D.

Hui Guo was born and raised in Shandong, China. He received his B.S. degrees of Automation and Economics from Tsinghua University in Beijing, China in 2009. He received his M.S. degree of Science in Computer Science in 2012 from East Carolina University in Greenville, NC, under the direction of Dr. Qin Ding.

Hui lived and studied in Raleigh, NC from 2015 to 2021, and received his Ph.D. from NC State in the Summer of 2021, advised by Dr. Munindar Singh. His research focused on Natural Language Processing for Software Engineering.

Hui now lives in Sunnyvale, CA, where he works as a Machine Learning Engineer in Quora.

Besides coding for ML models, Hui also enjoys photography and Pokemon Go.

DOCTOR of PHILOSOPHY

ZHEN GUO

Dissertation: *Understanding Interaction and Persuasion in Online Argumentative Discussions*

Committee Chair: Munindar Singh, Ph.D.

Zhen Guo was born in Kaifeng, Henan, China. She received her B.S. degree from Zhejiang University and her M.S. degree from Georgia Institute of Technology.

Zhen pursued and earned her Ph.D. from NC State, with a research focus on Natural Language Processing and It's Application.

After graduation, she became a Data Scientist in the Global Customer Experience team at eBay.

Zhen enjoys reading detective novels, bicycling, and playing disc golf.

DOCTOR of PHILOSOPHY

JINGZHU HE

Dissertation: *Automatically Fixing Performance Bugs and Extracting Bug Signatures for Cloud Systems*

Committee Chair: Xiaohui Helen Gu, Ph.D.

Jingzhu He grew up in Jiangsu, China, and received her B.S. degree in Electronic Engineering from Nanjing University in 2013. She then earned her M.Phil. Degree in Computer Science from Hong Kong Baptist University in 2016.

After that she moved to Raleigh, NC to pursue her Ph.D. in Computer Science at NC State, under the direction of Dr. Xiaohui Helen Gu.

Her research focused on software system reliability. Throughout her Ph.D. studies, she worked on automatically detecting, diagnosing, and fixing performance bugs in cloud systems.

Upon completing her Ph.D., Jingzhu is now working as a Tenure-Track Assistant Professor at Shanghai Tech University in China.

DOCTOR of PHILOSOPHY

JORDAN JUECKSTOCK

Dissertation: *Enhancing the Security and Privacy of the Web Browser Platform via Improved Web Measurement Methodology*

Committee Chair: Alexandros Kapravelos, Ph.D.

Jordan Jueckstock was born in Princeton, West Virginia and grew up as a homeschooled missionary kid near Vicenza, Italy. He received a B.S. from Bob Jones University in 2009 and a M.S. from the University of Tulsa in 2011.

After working at the National Security Agency, Jordan took a position teaching computer science at his alma mater (BJU) in 2014. In 2017 he began a leave of absence from BJU and relocated his family to Raleigh, NC to pursue a Ph.D. in Computer Science from NC State. His research focused on improving web browser privacy policies and measurement methodology.

Upon completion of his Ph.D., Jordan relocated his family back to Greenville, SC to resume his teaching responsibilities at BJU. In addition to teaching and advising students, he continues to enjoy expanding his understanding of computer systems, family life, and practical theology.

DOCTOR of PHILOSOPHY

YE MAO

Dissertation: *Temporal Skill Discovery For Modelling Student Learning Progression Across STEM Domains*

Committee Chair: Min Chi, Ph.D.

Ye Mao was born in a small town in Hubei Province, China in the summer of 1994. In 2015, she graduated from China Pharmaceutical University with a B.S. degree in Information Management Systems. Upon completing her B.S., she began pursuing her Ph.D. in Computer Science at NC State that same year.

Her first experience with Machine Learning was during her undergraduate studies when she worked on a spatial and impact factor analysis for AIDS. A later research project to which she devoted herself was to study tongue image processing. This had further inspired her to pursue a higher degree in computer science. It couldn't have been more fortunate for Ye during her studies at NC State to work under the direction of Dr. Min Chi on various projects to model student learning progression. Ye also learned a great deal from a lot of wonderful people during those years, which would be a priceless period in her life.

In the summer of 2018, Ye joined SAS Institute as a Graduate Intern. Around 3 years later, she decided to accept the offer to join SAS to continue her research on machine learning applications to industrial problems.

DOCTOR of PHILOSOPHY

SAMIHA MARWAN

Dissertation: *Investigating Best Practices in the Design of Automated Hints and Formative Feedback to Improve Students' Programming Outcomes*

Committee Chair: Thomas Price, Ph.D.

Samiha Marwan was born and raised in Cairo, the capital city of Egypt. She received her B.S. degree from the faculty of Computer Science at Ain Shams University in 2012, and then received her M.S. degree from the faculty of Informatics and Computer Science at the British University in Egypt in 2016.

In 2017, she moved to Raleigh, NC to pursue her Ph.D. in Computer Science at NC State. Samiha's research focused on designing, developing and evaluating automated feedback features in programming environments to improve students' cognitive outcomes (such as performance and learning), and affective outcomes (such as motivation and persistence).

In addition to her research, Samiha is interested in teaching programming and has taught introduction to programming courses and volunteered in outreach programs to teach middle-school students Computer Science topics.

Samiha has been awarded a CI-Fellowship award and will start her Post-Doc in Spring 2022 at the University of Virginia.

DOCTOR of PHILOSOPHY

ONKAR PATIL

Dissertation: *Assessing the Performance of and Devising Optimization Strategies for Heterogeneous Memory under HPC Workloads*

Committee Chair: Frank Mueller, Ph.D.

Onkar Patil was born and grew up in Mumbai, India. He received his B.S. degree in 2012 from Mumbai University in Information Technology. He then moved to Raleigh, NC in 2012 to pursue his M.S. degree in Computer Science from NC State. After completing his M.S. in 2014, he joined NetApp Inc. as a Member of the Technical Staff.

After completing a short internship at HPE Labs in Palo Alto, CA, he moved back to Raleigh, NC in 2016 to pursue his Ph.D. in Computer Science from NC State. His research focused on heterogeneous memory architectures and high performance computing.

Upon completing his Ph.D., Onkar moved to San Jose, CA, where he is now a Research Staff Member at IBM, Almaden Campus.

Besides doing systems research, Onkar enjoys interacting and collaborating with other students, traveling, playing music, soccer and cooking.

DOCTOR of PHILOSOPHY

MARKEL SANZ AUSIN

Dissertation: *A Transfer Learning Framework for Human-Centric Deep Reinforcement Learning with Reward Engineering*

Committee Chair: Min Chi, Ph.D.

Markel Sanz Ausin was born and grew up in Donostia, Spain. He received his B.S. degree in Computer Science from the University of the Basque Country.

He moved to Raleigh, NC in 2016 to pursue his Ph.D. in Computer Science from NC State. His research focused on using Deep Reinforcement Learning to improve online educational systems.

Upon completing his Ph.D. in 2021, Markel moved to the San Francisco Bay area in CA, where he is now a Deep Learning Algorithms Engineer at NVIDIA.

Besides developing deep learning and machine learning algorithms, Markel also enjoys spending time with friends and family, playing basketball, and hiking with his dog.

DOCTOR of PHILOSOPHY

ROBINSON N. UDECHUKWU

Dissertation: *Toward Realizing a Choice-Based Co-Optimizable Networking Paradigm*

Committee Chair: Rudra Dutta, Ph.D.

Robinson Udechukwu grew up in Charlotte, North Carolina. He received his B.S. degree in Computer Science from NC State in 2010.

He later returned to NC State to pursue his Ph.D. His research focused on network architecture, where he worked on both the ChoiceNet project, and the JUNO Optical ChoiceNet project, and designed service representation, negotiation, purchasing, and provisioning methods in those frameworks.

Upon completing his Ph.D., Robinson moved to Cary, NC where he is now a Software Engineer at NetApp.

DOCTOR of PHILOSOPHY

PEIPEI WANG

Dissertation: *Analyses of Regular Expression Usage in Software Development*

Committee Chair: Kathryn Stolee, Ph.D.

Peipei Wang was born and grew up in Henan province, China. She received her B.S. degree and M.S. degree from Xi'an Jiaotong University (XJTU) in 2010 and 2013, respectively.

She came to Raleigh, NC in 2013 to pursue her Ph.D in Computer Science from NC State. Her research focused on improving regular expression comprehension, testing, and maintenance through program analysis techniques. She is also interested in cloud systems and security.

Upon completing her Ph.D, she moved to Seattle, WA. Now she works at Tiktok Infrastructure System Lab as a Researcher / Engineer.

MASTER of SCIENCE
THESIS

Rishabh Agrawal
Using Explanations for Norm Emergence in Normative Multiagent Systems
Chair: Munindar Singh, Ph.D.

John Thomas Bacher
Evaluating Villanelle's Effectiveness for Autonomous Character Authoring
Chair: Chris Martens, Ph.D.

Bhavana Balraj
Multilabel Active Learning for User Context Recognition In-The-Wild
Chair: Munindar Singh, Ph.D.

Suma Kasa
Parametric Neural Adaptor Grammar for Unsupervised Entity Recognition
Chair: Munindar Singh, Ph.D.

Arvind Sastha Kumar
Federated Inverse Averaging: A Step Towards Pareto-Optimal Minima in Human Activity Recognition
Chair: Munindar Singh, Ph.D.

Aditya Parkhi
Novelty Detection in Textual Data Using Document Encoders and Self Attention
Chair: Munindar Singh, Ph.D.

Poorvaja Penmetsa
Identifying Struggling Students in Novice Programming Course with Knowledge Tracing
Chair: Thomas Price, Ph.D.

Sen Qiao
Group Signatures for Preserving Anonymity in Blockchain Supply Chain Transactions
Chair: Kemafor Ogan, Ph.D.

MASTER of SCIENCE
NON-THESIS

Usman Mahmood Khan
Gabriel Silva de Oliveira

MASTER of COMPUTER SCIENCE

Liam Adams
Aaron Rothemich Casey
Tanya Chu
Luis Delossantos
Shreeya Dhakal
Gray Dougherty
Colin Michael Foley
Miranda Jean Gabet
Mark Kuebler Gass III
Sara Ghodsi
Steven Green
Surbhi Jha
Xun Jia
Harsh Mansukhlal Kachhadia
Alec Joseph Landow
Xiaohan Liu

Abrar Mesbah
Jie Min
Jonathan Nguyen
Aaron Ott
Anna Owens
Timothy Ozimek
Sumitosh Pal
Tirth Dhirenkumar Patel
Casey Paver
Ruth Perry
Javier Alexander Sanchez
Eric Barry Starner
Abhishek Upadhyaya Ghimire
John Warren
Chenwei Zhou
Yuzhe Zhu

BACHELOR of SCIENCE

Degree Conferred June 20, 2021

Jarret Benjamin Raiford *
Matthew Stephen Zahn **

Degree Conferred July 30, 2021

Munyrah Alamro * s
Branden Cocciadiferro
Ian Holmes *
Wenyu Huang ***
Brenden Gregory Lech **
Joseph Michael Lutz **

Degree to be Conferred December 14, 2021

Nithika Aduri ***
Addison Curry Agatucci *+
Kaiz Akhtar ***
Ful AL Sayab **
Michael Babb *
Shalini Balagopal * s
James Henry Barkley **
Lorenzo David Battigelli
Andrew Paul Bennison ***
Ryan Alexander Bennison ***
Griffin Brookshire **
Dominic Taylor Brown *
Griffin Robert Buising **+
Thomas John Caldwell
Ryan Patrick Catalfu ***@
Pradhan Sudhanva G. Chetan Venkataramaiah***
Bansi Chhatrala ***+
Alexander Dalton Chung
Nicole Marie Colberg ***+
Kylee Coppock
Brandon James Daggerhart ***
Sebastián De La Torre **
Emily Dreyer ***
Justin Jacob Easow
Noah Dominik Eggenschwiler *
Tyler Alexander Emery ***
Maxx Jerrod Estes Γ
Samantha Lindsey Fasciolo **

Lydia Gray **
Christina Guirguis ***
Waseem Hanna **
Gavin Cooper Hardin ***
Simon Bryant Hayes ***
Nicholas Edward Herron *** s +
Ryan William Hess
John Logan Davis Hobbs *** Γ
Eli Wesley Hunter ***+
Jason Michael Hurst ***
Rhea Maria John ***
Kunal Kapoor ***
Benjamin David Kimbrough *** Γ
Kyle Lee Kleinke
Stephen Joseph Kubik ***
Benjamin Joseph Layko ***
Michael Manh Duy Le **
Erin Rose Litty **
Zhuoyi Liu ***
Atul Ashok Maske ***
Manishka Mathur
Logan Paul Michalak **
Robert Jackson Miller ** s
Colton Joseph Moore **
Garrett James Murray
Neel Kalpesh Patel
Bryce Charles Patisaul *
Anisha Ponnapati @
Nicholas Alexander Pontin **
Thomas Alexander Poole * s
Gabriel Joseph Reynolds
Nicholas Robert Richardson
Bryce Rooney **
Kiran Paige Ruff **@
Samuel Jerome Ryan **
Wesley Martin Smith **
Andrew Stewart
Akhil Kaja Talasila ***
Tanvi Dhirajlal Thummar **+
Thaddeus James Tutka *
Bruno Candido Volpato da Cunha ***

Travis Jacob Walter **
Kelly April Wang ** s
Samuel Thomas Weaver *
Matthew Hunter West Whiteman
John Forest Widdifield ***

Sarah Michelle Willis *** Γ
Yizhuo Wu *
Vincent Jian Xin **
Dingdong Yao *
Ting Wei Zheng ***

Bachelor of Science with Honors

*** - Summa cum laude (with highest honor), 3.75—4.0 GPA, gold sash.
** - Magna cum laude (with high honor), 3.5 – 3.74 GPA, silver sash.
* - Cum laude (with honor), 3.25 – 3.499 GPA, white sash.
Γ - Bachelor of Science in CSC with Game Development Concentration.
+ - Co-majors (students graduating with one or more degrees outside of
        Computer Science).
@ - Computer Science Student Ambassador.
s - Bachelor of Science in CSC with Security Track.

Computer Science Honors Program

Recipients of the Bachelor of Science in Computer Science with Honors have maintained a minimum GPA of 3.5 while completing a challenging program of computer science undergraduate study, including an honors thesis with a supervising professor.

Summer 2021

Wenyu Huang
Analysis of the System Compatibility from Lyra to Anthology
Honors Advisor: Chris Martens, Ph.D.

Brenden Lech
Defining Approaches to Creating a Story-Generation Engine
Honors Advisor: Chris Martens, Ph.D.

Fall 2021

Andrew Bennison
Proactive Positive Feedback
Honors Advisor: Tiffany Barnes, Ph.D.

Dominic Brown
Android VisibleV8
Honors Advisor: Alexandros Kapravelos, Ph.D.

Pradhan Sudhanva Gowda Chetan Venkataramaiah
Inspecting IoT Firmware for Analytic SDKs
Honors Advisor: Anupam Das, Ph.D.

Benjamin Franklin Scholar

The Benjamin Franklin Scholars program allows students to simultaneously pursue bachelor's degrees in both engineering and the humanities or social sciences. The program provides students with broad training and equips them with unique skills to solve complex problems.

Griffin Robert Buising

University Scholars Program

The University Scholars Program encourages students to excel academically in their majors while receiving a B.S. degree. The program requires individuals to complete a minimum of 21 hours of honors coursework while maintaining a "B" average, and graduating with an overall GPA of at least a 3.25.

Andrew Paul Bennison
Nicole Marie Colberg
Emily Dreyer
Christina Guirguis
Jason Michael Hurst
Rhea Maria John
Michael Manh Duy Le

University Honors Program

In order to be recognized as a University Honors Program graduate, students must complete a minimum of 12 credits of honors seminars, complete a six-credit "Capstone Experience", and maintain a cumulative GPA of 3.25 or higher.

Brandon James Daggerhart
Rhea Maria John
Vincent Jian Xin

COMPUTER SCIENCE FACULTY

Barbara Jasmine Adams, Ph.D.
Bita Akram, Ph.D.
Kemafor Anyanwu Ogan, Ph.D.
Dennis R. Bahler, Ph.D.
Suzanne Balik, Ph.D.
Tiffany Barnes, Ph.D.
Tzvetelina Battestilli, Ph.D.
Donald L. Bitzer, Ph.D.
Franc Brglez, Ph.D.
Min Chi, Ph.D.
Rada Y. Chirkova, Ph.D.
Anupam Das, Ph.D.
Ignacio Dominguez, Ph.D.
Jon Doyle, Ph.D.
Rudra Dutta, Ph.D.
William Enck, Ph.D.
Edward F. Gehringer, Ph.D.
Xiaohui (Helen) Gu, Ph.D.
Khaled Harfoush, Ph.D.
Christopher G. Healey, Ph.D.
Steffen Heber, Ph.D.
Sarah S. Heckman, Ph.D.
Margaret R. Heil, M.S.
Jamie A. Jennings, Ph.D.
Arnav Jhala, Ph.D.
Shuyin Jiao, Ph.D.
Guoliang Jin, Ph.D.
Alexandros Kapravelos, Ph.D.
Jason King, Ph.D.
James C. Lester, Ph.D.
Xu Liu, Ph.D.

Collin Lynch, Ph.D.
ToniAnn Marini, M.Ed.
Chris Martens, Ph.D.
Noboru Matsuda, Ph.D.
Timothy Menzies, Ph.D.
Frank Mueller, Ph.D.
John-Paul Ore, Ph.D.
Christopher Parnin, Ph.D.
Harry Perros, Ph.D.
Thomas Price, Ph.D.
Michael Rappa, Ph.D.
Bradley Reaves, Ph.D.
David L. Roberts, Ph.D.
Gregg Rothermel, Ph.D.
George N. Rouskas, Ph.D.
Carla Savage, Ph.D.
Alessandra Scafuro, Ph.D.
Jessica Schmidt, Ph.D.
Muhammad Shahzad, Ph.D.
Donald Sheehy, Ph.D.
Xipeng Shen, Ph.D.
Munindar P. Singh, Ph.D.
Matthias Stallmann, Ph.D.
Kathryn T. Stolee, Ph.D.
David Sturgill, Ph.D.
Raju Vatsavai, Ph.D.
Mladen A. Vouk, Ph.D.
Benjamin Watson, Ph.D.
Laurie Williams, Ph.D.
Ruozhou Yu, Ph.D.

COMPUTER SCIENCE STAFF

Carol Allen
Carlos A. Benavente, M.S.
Kiresten Branch, M.S.
Marcus Bullett, B.S.
Veronica Cateté, Ph.D.
Tammy Coates, B.A.
Kirby Culbertson, M.S.
Marhn Fullmer, B.S.
Todd Gardner
Cara Glover, M.S.
Christopher Gurley, B.S.
Marnie Hill, M.S.
Linda Honeycutt
Ann Hunt, M.S.
Seung Lee, Ph.D.
Kathy Luca, B.B.A.
Tim MacNeil, M.S.
Terri Martin-Moss
Tyler Mayberry, B.S.
Wookhee Min, Ph.D.
Bradford Mott, Ph.D.

Trey Murdoch, B.S.
Jignasa Patel, B.S.
Justin Phillips, M.S.
Tyler Puckett, B.S.
Leslie Rand-Pickett, M.Ed.
Sarah Reaves, M.S.
Donna Richards, B.A.
Jonathan Rowe, Ph.D.
Sara Seltzer, M.S.
Andrew Sleeth, B.A.
Becky Smith
Peter Smith, M.S.
Randall Spain, Ph.D.
Kenneth Tate, B.A.
Robert Taylor, M.S.
Sandra Taylor, M.S.
Zelda Tuazama, B.S.
Thierry Ketchiozo Wandji, Ph.D.
Gary Weinberg, Ed.D.
Lauren Williamson, B.S.
David Wright, Ph.D.

MARSHALS

Ashley Brown, *senior*
Myles Gregor, *sophomore*
Brooke Raschke, *senior*
Manali Shirsekar, *senior*

HONORING OUR RETIREES

The faculty and staff of the Department of Computer Science wish to extend our deepest gratitude and appreciation to the individuals retiring this academic year. Please join us in celebrating the incredible achievements of these departmental icons, and in recognizing them for their outstanding service to our department, NC State, and the State of North Carolina.

Dennis Bahler, Ph.D.

Dr. Bahler received his Ph.D. from the University of Virginia in 1987 and joined NC State as an Assistant Professor in 1987. He was promoted to Associate Professor in 1993. From 2003 – 2004 he served as the Interim Director of Undergraduate Programs and he became the Director in 2004, until his phased retirement began in August 2018. He also served as the Director of the Computer Programming Certificate for CSC from 2009 – August 2018. Dr. Bahler's research interests are in Artificial Intelligence and Intelligent Agents. In 1996, he was the department's nominee for the Alcoa Foundation Distinguished Engineering Research Award. He has served on various departmental and college committees. Over his career he has published over 90 refereed journal articles and conference papers. He served as primary advisor and mentor for 10 Ph.D. students and 36 Master's students. Because of the impassioned efforts of Dr. Bahler and other dedicated faculty members, NC State announced earlier this year that they would be launching a Data Science Academy in Fall 2021 that will provide undergraduate students of any major the access to various data science courses and the option to add a data science minor.

Harry Perros, Ph.D.

Dr. Perros received his Ph.D. from Trinity College in Dublin, Ireland in 1975 and joined NC State as an Associate Professor in 1982. He was promoted to Full Professor in 1988. Dr. Perros' research interests are in Data Sciences and Analytics and Networking and Performance Evaluation. Over his career he has published 5 books (single author) and co-authored 2 books, over 100 refereed journal articles and conference papers. He is an IEEE Fellow. He served as primary advisor and mentor for 36 Ph.D. students and 19 Master's students. He was named an NC State Alumni Distinguished Graduate Professor in 2002 – 2003. In 1999, he co-founded the Master of Science degree program in Computer Networks at NC State University and served as the program's coordinator.

Carla Savage, Ph.D.

Dr. Savage received her Ph.D. from University of Illinois, Urbana-Champaign in 1977 and joined NC State as an Assistant Professor in 1978. She was promoted to Associate Professor in 1984, and to Full Professor in 1994. She served as the CSC Department Ombudsman. Dr. Savage was the Secretary of The American Mathematical Society since 2013 and retired from that commitment in June. Dr. Savage's research interests are in combinatorics, focused on the theory of partitions. She is a fellow in The American Mathematical Society, she won the department's Carol Miller Outstanding Lecturer Award in 2009 – 2010, the Carol Miller Teaching Award in 2008 – 2010, Most Insightful Professor Award in 2007 and the Best Lecturer Award in 2004. She has served on numerous committees for the department and the college. Over her career she has published over 100 refereed journal articles and conference papers. She served as primary advisor and mentor for 4 Ph.D. students and 20 Master's students, as well as a member of 44 Ph.D. committees and 45 Master committees. Because of Dr. Savage's many accomplishments and contributions to the NC State Computer Science Department, the Department created "The Carla Savage Awards." These awards, in honor of Dr. Carla Savage, recognize individuals within the department who display exemplary characteristics and outstanding achievements.

Marhn Fullmer, B.S.

Marhn has been a dedicated employee of the College of Engineering and Department of Computer Science at NC State for over 21 years. During his tenure, he oversaw our Networking Labs. In this capacity, he did the maintenance and construction of networking and laboratory infrastructure accessed 24/7 for courses; and movement of servers, workstations, networking and ancillary equipment. Prior to joining NC State, he worked in the private sector for 14 years with General Electric Company – Aerospace Group; Access and Transmission; Carrier Equipment; and Alcatel Network Systems.

Ann Hunt, M.S.

Ann has been a dedicated employee of NC State for over 21 years. She transferred to the Computer Science Department in July 2007. In her first position with our department she was our financial director taking over the realms after an employee retired in that position. In 2009 when our Contracts and Grants manager transferred to another department, Ann was promoted to fill this vacancy which she says was her "dream job". Her record keeping is impeccable. Ann takes pride in her job and it shows in her performance and actions. She brought to our department consistency in her job responsibilities, dependability and trustworthiness in all she did. She is a licensed CPA and worked in the private sector before coming to NC State.

Zelda Tuazama, B.S

Zelda has been a dedicated employee of NC State since August 1994, where she began her employment in the Registration and Records Office. She transferred to our department in 2013. Zelda's many years of experience helped her utilize and enrich her tactical, communication and diplomacy skills. On a daily basis, she worked diligently with faculty members, students, staff and the general public. A truly committed employee, Zelda exemplifies the best kind of customer service to anyone who needs her help. She brought to our department a positive contribution. Our undergraduate office was the beneficiary of someone who is talented as Zelda is.

ALL OF OUR RETIREES WILL TRULY BE MISSED!

PHOTOGRAPHY / VIDEO

Photo Specialties, a professional photographer, will take each graduate's picture as they are handed the diploma. A free color proof will be sent to each graduate's current mailing address, including a password for online viewing. There is no obligation to purchase prints. To receive email notification when photos are online, please visit www.photospecialties.com to pre-register. If a proof is not received within a week of the ceremony, please contact info@photospecialties.com or call 1-800-722-7033.

For the benefit of relatives and friends who may not be able to attend the event in person, we are pleased to announce that the event will be available online via **live video streaming at http://go.ncsu.edu/csc-diploma**. Firefox, Internet Explorer, and Safari are recommended for viewing the live streaming of the ceremony.

The Department of Computer Science thanks

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and

NC State Engineering Foundation

**for sponsoring our Fall 2021
diploma ceremony. Their generous
support benefits the students, faculty,
and staff of the department.**

**Our sponsors join us in congratulating the
Fall 2021 North Carolina State University
Computer Science graduates.**