NORTH CAROLINA STATE UNIVERSITY

SPRING DIPLOMA CEREMONY

DEPARTMENT of COMPUTER SCIENCE

Friday, May 10, 2019

James T. Valvano Arena at William Neal Reynolds Coliseum

1:00 P.M.

Welcome

Welcome to the Spring 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 1,850 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 Spring 2019 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 9,800.

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

As a courtesy to all our graduates and in recognition of the significance of this ceremony, we ask that all cell phones and pagers be turned off. Also, once the ceremony begins, we ask that all guests remain seated until its conclusion. Thank you for your cooperation!

SPRING DIPLOMA CEREMONY

James T. Valvano Arena at William Neal Reynolds Coliseum
Friday, May 10, 2019
1:00 P.M.

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 ....Jim Fletcher
Strategy Partner with Momenta Partners

Introduction of Honor Students, Faculty and Staff .... Sarah Heckman, Ph.D.
Director of Undergraduate Programs

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

GUEST SPEAKER
Jim Fletcher

Jim Fletcher is an independent advisor, working with Momenta Partners as a Strategy Partner, focused on helping clients worldwide to drive Digital Transformation across a range of industries. Jim is a former IBM Distinguished Engineer, CTO for the Watson IoT Platform, IBM Master Inventor, and member of the IBM Academy. He has extensive experience around Connected Industry (Cloud and IoT) with a strong focus on Edge Computing, and the role of analytics in driving business transformation.

Jim holds over 60 patents and is a regular speaker at conferences worldwide on a range of emerging topics. He is a member of the NC State University Executive in Residence program and was recently inducted into the NC State University CSC Alumni Hall of Fame.

Jim graduated from NC State with a B.S. in Computer Science in 1976.

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

NIRAV AJMERI

Dissertation: *Engineering Multiagent Systems for Ethics and Privacy-Aware Social Computing*

Committee Chair: Munindar Singh, Ph.D.

Nirav Ajmeri was born in Vadodara, India, and grew up in Mathura. He received his B.E. degree in Computer Engineering from the Gujarat Technological University in 2007. After obtaining his B.E., he worked with Tata Research Design and Development Center in Pune, India, for five years as a Software Engineering researcher.

Nirav's inclination toward research motivated him to move to Raleigh, NC in 2012 to pursue a Ph.D. in Computer Science at NC State. His dissertation research develops artificial intelligence and software engineering techniques to engineer socially intelligent agents that select ethically-appropriate and privacy-respecting actions for their human users. During his Ph.D. studies, Nirav interned with HERE Technologies' CTO Research team. He received the 2017 Computer Science Outstanding Research Award and the 2019 Computer Science Outstanding Dissertation Award by the Department of Computer Science at NC State.

Upon completing his dissertation, Nirav started as a Post-Doctoral research scholar at NC State.

DOCTOR of PHILOSOPHY

KARA BRADLEY CASSELL

Dissertation: *Dynamic Generation of Narrative Discourse that Communicates Character Decision Making*

Committee Co-Chairs: David Roberts, Ph.D. and Michael Young, Ph.D.

Kara Bradley Cassell grew up in Oakton, VA. She received her B.S. degree in Computer Science and B.A. degree in Economics in 2006 from Virginia Polytechnic Institute and State University. Afterwards, she moved to North Carolina with her wife to start her Ph.D. in Computer Science under Dr. Michael Young. Her research is focused on the use of artificial intelligence to generate stories, cut scenes, comics, and game play experiences.

During her Ph.D. studies, Kara worked full-time as a game developer and started a family. She also worked as a researcher on the NSF IC-Crime project under Dr. Young.

Upon completing her Ph.D. studies, Kara will continue to work as a game developer, as well as continue her research into the use of A.I. for story telling and crafting game playing experiences.

DOCTOR of PHILOSOPHY

MANDAR CHAUDHARY

Dissertation: *Methods for Learning and Predicting Causal Relationships from Observational Data*

Committee Chair: Nagiza Samatova, Ph.D.

Mandar grew up in Gujarat, India, and received his B.E. degree in Computer Engineering from the Gujarat Technological University. In 2012, he moved to Raleigh, NC, for his graduate studies and completed his M.S. and Ph.D. in Computer Science at NC State.

His research focused on developing novel methods for discovering causal relationships from observational data.   During his Ph.D. studies, Mandar had an internship at Motorola in California.

Upon the completion of his dissertation, he will work for a startup based in Durham, NC, as a Data Scientist.

DOCTOR of PHILOSOPHY

ZEYUAN CHEN

Dissertation: *High Resolution and Fast Face Completion with Multiple Controllable Attributes via Progressively Attentive Generative Adversarial Networks*

Committee Chair: Christopher Healey, Ph.D.

Zeyuan was born in Henan Province and grew up in Wuhan, China. He received his B.S. degree in Electrical Engineering from Huazhong University of Science and Technology in China and M.S. degree in Electrical Engineering from Cornell University.

Zeyuan moved to Raleigh in 2014 to begin his Ph.D. in Computer Science at NC State, under Dr. Chris Healey. His research is focused on computer vision, visualization and human-computer interaction. He has published and presented his work at various venues, both formally and informally.

Upon completing his Ph.D. studies, Zeyuan moved to Mountain View, CA, where he is now an Applied Scientist at Salesforce Research. His duties range from implementing research models to rapid prototyping demos that show off applications of deep learning on production data. He develops models, prototypes, and experiments that push state-of-the-art research in Artificial Intelligence research, paving the way for innovative products.

DOCTOR of PHILOSOPHY

LINGNAN GAO

Dissertation: *Resource Allocation in Virtual Network Environments*

Committee Chair: George Rouskas, Ph.D.

Lingnan Gao grew up in Beijing, China, and received his Bachelor degree in Communication Engineering from Beijing University of Posts and Telecommunications in 2014.

Lingnan moved to Raleigh, NC in 2014 to pursue his Ph.D. degree at NC State. His research focuses on the algorithm design for network optimization problems, with an emphasis on the network virtualization environment.

Upon completing his Ph.D. studies, Lingnan will join Facebook as a Research Scientist.

DOCTOR of PHILOSOPHY

SHIOU TIAN HSU

Dissertation: *Rationale-based Neural Networks for Justifiable Relation Extraction*

Committee Chair: Nagiza Samatova, Ph.D.

Shiou Tian Hsu grew up in Taiwan, where he received a M.S. degree in Technology Management from the University of Illinois at Urbana-Champaign and a M.S. degree in Management Information Systems from National Chengchi University at Taiwan, under a dual degree program in 2013. He moved to Raleigh, NC in 2014 to pursue his Ph.D degree in Computer Science at NC State, under the supervision of Dr. Nagiza Samatova.

Shiou Tian's research focuses on Natural Language Processing and Deep Learning, where applications of his research include sentiment analysis and relation classification. During his Ph.D. studies in 2018, he had an internship at Facebook in Seattle, WA, where he worked on News Feed and Search Projects.

Upon the completion of his dissertation, Shiou Tian moved to Seattle and joined Facebook as a Research Scientist.

DOCTOR of PHILOSOPHY

ROBERT LOFTIN

Dissertation: *Extracting Latent Knowledge to Reduce Teacher Effort in Interactive Machine Learning*

Committee Chair: David L. Roberts, Ph.D.

Robert Loftin was born in Durham, NC, in 1989, and grew up in Greensboro, NC. He attended the Georgia Institute of Technology in Atlanta from 2008 to 2011, receiving a B.S. degree in Computer Science in the Spring of 2011.

He pursued his Ph.D. in Computer Science at NC State in Raleigh from 2011 to 2019, under the supervision of Dr. David Roberts. As a student, his research interests have included reinforcement learning and human-in-the-loop machine learning, as well as robotics and deep learning.

Robert is currently a Post-Doctoral researcher at Microsoft Research in Cambridge, UK, after which he hopes to pursue a research-focused faculty position.

DOCTOR of PHILOSOPHY

VIVEK NAIR

Dissertation: *Frugal Ways to Find Good Configurations*

Committee Chair: Timothy Menzies, Ph.D.

Vivek Nair grew up in Kolkata, India. Before joining the Computer Science Ph.D. program at NC State, he was a Software Engineer at Samsung Software Engineering Labs in Noida, India.

Vivek's primary research interest is search-based software engineering, with the primary goal of maximizing the quality of a "search" while minimizing its cost. His research challenged well-established solutions in software engineering and cloud architecture tuning. During his Ph.D. studies, Vivek interned with LexisNexis Risk Solutions from 2015-2017 and Microsoft Research in 2018.

He is continuing as a Research Scientist with Facebook and will explore solving developer pain points with data-driven approaches. In short, he is doing the same thing he was doing at grad school.

DOCTOR of PHILOSOPHY

TERRENCE J. O'CONNOR

Dissertation: *Network Access Control through Host and Application Analysis*

Committee Chair: William Enck, Ph.D.

TJ O'Connor received his B.S. degree in Computer Science from the US Military Academy in 1999. Following graduation, TJ served 20 years in the US Army, retiring at the rank of Lieutenant Colonel. In 2008, TJ earned a M.S. degree in Computer Science from NC State. Following his M.S. graduation, he served as an Assistant Professor in the Electrical Engineering and Computer Science Department at the US Military Academy. In 2013, he moved back to Fort Bragg, NC, to serve in the 1st Special Forces Command (Airborne), and began a Ph.D. in Computer Science at NC State, under Dr. William Enck.

TJ's research focused on the design and analysis of advanced network access control schemes that leverage host and application context to defeat elaborate and complex attacks. During his studies, he developed a machine learning algorithm to classify semantic device behaviors from IoT devices and conducted a large scale study of device blinding vulnerabilities.

Following graduation, TJ will serve in a Tenure Track Faculty Position at the Florida Institute of Technology in the College of Computer Sciences and Cybersecurity.

DOCTOR of PHILOSOPHY

SHITIAN SHEN

Dissertation: *Improving Learning and Reducing Time: A Constrained Action-Based Reinforcement Learning Approach*

Committee Chair: Min Chi, Ph.D.

Shitian Shen grew up in He Nan, China and received his B.S. and M.S. degrees in Computer Science from Xidian University and the University of Southern California.

Shitian moved to Raleigh, NC in 2013 to pursue a Ph.D. in Computer Science at NC State. His research focused on educational data mining, specifically, applying reinforcement learning for decision making in the intelligent tutoring system.

With his advisor, Dr. Min Chi, and fellow researchers, Shitian published almost 10 papers and received an outstanding paper award.

DOCTOR of PHILOSOPHY

RUIXIN YANG

Dissertation: *Algorithms for Data-driven Business Intelligence with Applications to Revenue Optimization and Financial Forecasting*

Committee Chair: Nagiza Samatova, Ph.D.

Ruixin Yang grew up in Sichuan, China, and received his B.S. and M.S. degrees in Engineering from Shanghai University in 2011 and 2014, respectively. Afterwards, he moved to Raleigh, NC to begin a Ph.D. in Computer Science at NC State, under Dr. Nagiza Samatova.

His research focused on business intelligence, quantitative analysis, evolutionary algorithms and applied data science. During his Ph.D. studies, he published six papers and presented his work at various conferences.

Upon completing his Ph.D. studies, Ruixin is now working as a Data Scientist at Durham VA Health Care System. His work there focuses on applying optimal data science methods for various clinical research, including risk prediction and clinical decision support.

DOCTOR of PHILOSOPHY

YUAN ZHANG

Dissertation: *Every Moment Counts: Deep Variability Reasoning in EHR Data*

Committee Chair: Min Chi, Ph.D.

Yuan Zhang grew up in Jinan, China. She received her B.S. and M.S. degrees in Electronic Engineering from Beijing University of Technology.

Yuan moved to Raleigh, NC in 2014, as a Ph.D. student in Computer Science at NC State. Her research focused on designing and applying deep neural networks for disease progression modeling on a large scale of healthcare dataset.

Besides her academic life in school, Yuan has gained industrial experience from several internships, including eBay, The Mayo Clinic, and Apple.

Upon the completion of her Ph.D., she will work for Apple as a Data Scientist.

MASTER of SCIENCE
THESIS

Sanket Goutam
Hestia: Simple Least Privilege Network Policies for Smart Homes
Co-Chairs: William Enck, Ph.D. and Bradley Reaves, Ph.D.

Owais Iqbal
Villanelle: Towards Authorable Autonomous Characters in Interactive Narrative
Chair: Chris Martens, Ph.D.

Akshay Nalwaya
Using Hoeffding Sampling and Project Elimination to Make Bellwether Discovery Faster
Chair: Timothy Menzies, Ph.D.

Qiang Zhang
The Smart Agent-based Model in Urban Growth Problems
Chair: Raju Vatsavai, Ph.D.

MASTER of SCIENCE
NON-THESIS

Andrew Emerson
Zhen Guo
Colin Potts
Nischal Shrestha
Kenneth Tran
Rui Zhi

MASTER of SCIENCE in COMPUTER NETWORKING
NON-THESIS

Srikanth Gopalakrishnan
Harish Annamalai Palaniappan
Alaykumar Patel
Ragavi Swarnalatha Raman
Chinmay Nandkumar Shinde

MASTER of COMPUTER SCIENCE

Unnati Agrawal
Rajan Alwan
Tameem Alwohaibi
Daxkumar Amin
Anshul Atriek
Ragavendran Balakrishnan
Srujan Barai
Jordan Beichler
Darshan Balakrishna Bhandari
Abhishek Bhardwaj
Dharmang Bhavsar
Shivam Chamoli
Rohan Chandavarkar
Sarath Chandra Chaparla
Aman Chauhan
Peter Morgan Chen
Kapil Chopra
Brantley Collins
Rahul Oswald Coutinho

Zachery DeLong
Timothy Dement
Deeraj Deshpande
Sahil Dorwat
Smit Doshi
Lucas Enloe
Xiaoting Fu
Aaroh Ramesh Gala
Pragam Manoj Gandhi
Srija Ganguly
Yana Sergeyevna Geer
Vismay Golwala
Xinyu Gong
Sathwick Goparapu
Yujie Gui
Satish Gurav
Mohammed Hassan
Vijay Hebbar
Himani Himani

MASTER of COMPUTER SCIENCE
(continued)

Yushu Huang
Rishabh Jain
Vidhisha Jaswani
Aditya Joshi
Srikara Krishna Kanduri
Chandrahas Reddy Kanmanth Reddy
Neel Kapadia
Nilay Kapadia
Sanya Kathuria
Shyam Prasad Katta
Anupama Kesari
Veeha Khanna
Siddhartha Kollipara
Tanay Kothari
Kunal Kulkarni
Kshittiz Kumar
Sachin Kumar
Louis Le
Weijia Li
Han-Ping Lin
Chengyuan Liu
Jiufeng Liu
Zhiyu Liu
Cherukeshi Machan
Madhu Machavarapu
Hari Krishna Majety
Suvodeep Majumder
Priyance Mandlewala
Akshit Mahaveer Meghawat
Apoorva Mehta

Andrew Miller
Piyush Mishra
Wade Patrick Moore
Prashant Nagdeve
Parth Nagori
Jason Nance
Tushar Nargunde
Tushar Pahuja
Abhishek Pandey
Kavi Pandya
Srinivas Parasa
Urmil Ashish Parikh
Omkar Parkhe
Darshil Patel
Pushpendra Singh Patel
Aayush Patial
Cosmo Pernie
Mayur Phadte
Sameer Surendra Poudwal
Akshay Ravichandran
Amber Raza
Muppidi Harshavardhan Reddy
Haoxu Ren
Ashwin Risbood
Sweta Rout
Krithika Sekhar
Henil Shah
Riken Shah
Rohil Shah
Saurabh Vivek Shanbhag

MASTER of COMPUTER SCIENCE
(continued)

Arjun Sharma
Kamal Sharma
Pranita Sharma
Shikhar Sharma
Arpita Shekhar
Sainag Shetty
Tian Shi
Richa Shukla
Arjun Sivagaminathan Mathan Kumar
Rhett Stephen Smith
Abhay Soni
Vidhyalakshimi Sreenivasan
Abhishek Kumar Srivastava
Zelin Sun
Sai Harsha Suryadevara
Anirudha Tambolkar

Xiaorui Tang
Aurora Tiffany-Davis
Advait Trivedi
Angela Tsai
Aditya Dhananjay Upadhyay
Karthikeyan Vaideswaran
Tianyu Wu
Fan Yang
Kunmiao Yang
Brent Younce
Lei Zhang
Wenyi Zhang
Yichi Zhang
Zhikang Zhang
Lin Zhu
Rui Zhu

GRADUATE AWARDS & FELLOWSHIPS

Anita Borg Foundation Scholarship: Anjali Doneria, Ruth Okoilu, Jennifer Tsan

Best Paper Award at the 2019 Special Interest Group on Computer Science Educaton (SIGCSE): Sean Mealin

COE Graduate Merit Award: Daniel Carpenter, Hassan Iqbal, Christopher Miller, Nikolaos Pantelaios, Gabriel Silva de Oliveira, Levente Szabo

ESRI Development Center International Student of the Year: Ashwin Shashidharan

Grace Hopper Conference Attendees: Gina Bai, Effat Farhana, Niki Gitinabard, Amrutha Hakkare Arunachala, Jingzhu He, Richa Shukla, Aishwarya Sundararajan, Sz-Ting Tzeng, Weijie Zhou

Graduate Student Leadership Award: Jennifer Tsan

Mentored Teaching Assistantship (MTA) Award: Andrew van der Poel

Outstanding Dissertation Award: Nirav Ajmeri

Outstanding Research Award: Lingnan Gao

Outstanding TA Award : Chinmaya Dabral

Provost Fellowship: Amy Isvik, Muhammed Yusuf Satici, Justin Whitaker

SREB Doctoral Scholars Fellowship: Abenezer Wudenhe

University Graduate Fellowship: Kuan Chieh Hsu, MD Rayhanur Rahman, Abenezer Wudenhe

BACHELOR of SCIENCE

Galen Jackson Abell **
Austen Gregory Adler **
Gitesh Agarwal
Ryan Joseph Alexander
Abeer Altaf ***
Hardik Aneja
Bryan J. Arrington
Macyn P. Baker
Thomas Vance Barnette *** +
Jason Drawdy Benckert
Christopher Anthony Benfante
Saahil Darshan Bhutwala Γ
Joseph P. Binny
Margaret Boehlert *
Larry Vincent Boyd Γ
Joshua Adam Britt *
Dylan Bryan *
Matthew F. Callis ** Γ
Philip D. Callis **
Michael Jean-Luc Canziani **
Joshua Berry Carpenter ***
Jason Chitla ***
Claire Jane Christopher ** Γ
Joshua Glenn Cohenour
Sean Patrick Collins * Γ
Nicholas Robert Conlon **
Yuquan Cui
Adam Gregory Davis ***
Christopher E. Davis *** Γ
Tyler James Deaton *** Γ

Devonte Nobel Dereef *
Anupam Devulapalli *
Thomas Aaron Dickerson **@
Matthew James DiVincenzo *
Madeline Randall Downs **
Jacob Thomas Dremann ***
Edward Alexander Dunlop
David Foster Echelberger *
Timothy J. Fallon III
Hanna Fernandez **@
Hiru Fernando *
Timothy Michael Figgins * Γ
Ezekiel Jeremiah Finley ** Γ
Allison Leigh Fisher *
Ian Michael Fisher **
Kelly Elisabeth Fleming
Taylor Mackenzie Floyd **
Adhithiyan Raaj Francis **
Antonio Stephen Gargano * +
James R. Gilkey
Peter Louis Girouard *** +
Gabriel Kuan-Liang Gloss **
Keith Riley Goepfert *
Harry Robinson Goldin
Bryan Alvarado Gonzalez +@ ~
Justin Alexander Gonzalez *
Robert Franklin Goodnight ***
Matthew R. L. Gray *@ ~
Derian A. Green
Daniel Joseph Grochmal *

BACHELOR of SCIENCE

(continued)

Cameron Michael Harris **
Andrew D. Hayes *** Γ
Christopher Earl Haynes **
Samuel Henderson ***
Cameron Joseph Hetzler
Henry Michael Hobbs *
Jason Hudgins
Jinho Hyun *
Justin T. Irene
Randy Kamel Jaouhari *
Haoyu Jing ***
Alexander Broering Johnson **
Quadedria Y. Jones *
Pranesh Pokaloorie Kamalakanthan * Γ
Cassandra Nicole Keesee *
Sena T. King ** +
Natalie S. Landsberg *@
Nathanael David Lane Γ
Michelle Kaye Lemons *** +@
Joseph Marc Leonardi Γ
Anders Liman ** +
Adam Christopher Luck ***
Catherine Alexandra Lumsden ***
Weikun Ma ***
Malik Alexander Majette ***@ ~
Richard Drew Marshburn ***@
Logan Thomas McMillan ***
Timothy Collin Medlin
Elizabeth Colleen Mikovitz ** +
Katherine Suzanne Mitchell Γ

Robert Joseph Montgomery ***
Hannah Morrison
Anthony Mosolf **
Evan Murphy ***
Joshua Taylor Nelson **
Cody Zeus Nesbitt
Calvin Van Nguyen **
Tyler R. Nielsen *** +
Megan O'Connor *
Kevin Paul Owczarski ** Γ
Anthony John Pappas **
Jaydevsinh Parmar **
Hiteshwari Hitesh Patel
Ryan Charles Quistorff *** Γ
Daniel Rabstejnek *
Deepthi Gururaja Rao ***@ ~
Jonathan Keith Raynor
Trevor Alexander Redding *
Theodore L. Reger *** Γ
Amiya Renavikar
Lahari Revuri ***
Courtney T. Ripoll *
Samuel Ryne Ritter ***
Jordan Dakota Roberts * Γ
Hayley S. Russell *** +
Alexander J. Sawyer
Jack W. Schaffner *
Justin George Schwab ***
Caleb W. Scott ***
James Dillon Dean Seegers ***

BACHELOR of SCIENCE
(continued)

David Senerchia
Amanda Nicole Shafer **
Austin Shafer *
Nicholas Ross Sherrill
Nikhil Navin Shirsekar *@
Peter Nathaniel Shore ***
Prajesh Singh **
Michael Sirio *** Γ
Joseph Warren Stanley *** +
Jacob Robert Struckmeyer
Prem Kumar Subedi **
Meghana Subramaniam * +@ ~
Allen Joe Thomas ***
James Ryan Ticatic **
Jeremy Morton Timperio * Γ
Luc Tran ***

Richard Alan Trevorrow *
Corin Alexander Vandiver
James Tucker Wall ***
Henry Kilian Walsh
Matthew Charles Walters
Shuzheng Wang *
Aaron Alexander Watson *
Garrett Collin Watts ***
Aleksandr Douglas White *
Jacob Michael Whittaker
Alan Dale Woodlief III *** +
Nicholas Lee Wrenn **
Andrew L. Wright * +
Ruiwen Wu **
Yuan Zhang *
Kefu Zhu ** Γ

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.

~   - Computer Science Marshal.

UNDERGRADUATE AWARDS & SCHOLARSHIPS

Computer Science Senior Award for Citizenship and Service
Malik Alexander Majette

Computer Science Senior Award for Scholarly Achievement
Michelle Kaye Lemons

Computer Science Senior Award for Leadership
Natalie S. Landsberg

Computer Science Senior Award for Humanities
Hayden V. Lawrence

Computer Science Faculty Senior Scholar
Malik Alexander Majette

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.

Abeer Altaf
User Experience in Peer-Assessment System
Honors advisor: Edward Gehringer, Ph.D.

Adam Gregory Davis
Bio-Inspired Computation with Julia
Honors advisor: Steffen Heber, Ph.D.

Ezekiel Jeremiah Finley
Comparing AI Strategies for Multi-Action Turn-Based Games
Honors advisor: Arnav Jhala, Ph.D.

Allison Leigh Fisher
Tensor Networks
Honors advisor: Blair Sullivan, Ph.D.

Adhithiyan Raaj Francis
Stress Detection
Honors advisor: Christopher J. Parnin, Ph.D.

Gabriel Kuan-Liang Gloss
Natural Language Processing on Reddit
Honors advisor: Munindar P. Singh, Ph.D.

Natalie S. Landsberg
Recovering an OSPF Network from Malicious Attacks: An Experimental Evaluation of Recovery Techniques
Honors advisor: Douglas S. Reeves, Ph.D.

Hannah Morrison
Linear Logic Programming for Social Skills Training
Honors advisor: Chris Martens, Ph.D.

Calvin Van Nguyen
Application of Circuit-based Quantum Programming to Classical and Machine Problems
Honors advisor: Wu-Show Chou, Ph.D.

Anthony Mosolf
Requirements Engineering for Autonomous NPCs in Games
Honors advisor: Chris Martens, Ph.D.

Anthony John Pappas
Tracking a Dog's Tail in 3D Space
Honors advisor: David L. Roberts, Ph.D.

Lahari Revuri
Food Donations, Distributions, and Waste at Hunger Relief Organizations (Flexible, Equitable, Effective and Efficient Distribution Project)
Honors advisor: Min Chi, Ph.D.

Hayley S. Russell
Structural Rounding: A Practical Evaluation
Honors advisor: Blair Sullivan, Ph.D.

Meghana Subramaniam
Beauty and Joy in Computing Research Proposal
Honors advisor: Tiffany Barnes, Ph.D.

Alan Dale Woodlief III
Enumerating Non-Induced Maximal Bicliques in Near-Bipartite Graphs
Honors advisor: Blair Sullivan, Ph.D.

Nicholas Lee Wrenn
Docker for Research
Honors advisor: Collin Lynch, Ph.D.

Andrew L. Wright
Benchmarking Treewidth as a Practical Component of Tensor-network-based Quantum Computation
Honors advisor: Matthias Stallmann, Ph.D.

Park Scholars

A four-year scholarship covering tuition, fees, room, board, books, supplies, travel, and personal expenses.

Peter Louis Girouard

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.

Matthew Barton Bennison
Gayle C. Bussell
Adam Gregory Davis
Taylor Mackenzie Floyd
Bryan Alvarado Gonzalez
Connor James Hall
Tam Hoai Le
Michelle Kaye Lemons
Richard Drew Marshburn
Evan Murphy
Anthony John Pappas
Ryan Charles Quistorff
Lahari Revuri
Hayley S. Russell
Daniel Frank Schaffer
Joseph Warren Stanley

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.

Timothy Michael Figgins
Ian Michael Fisher
Adam Christopher Luck
Malik Alexander Majette
Elizabeth Colleen Mikovitz
Joshua Taylor Nelson
Deepthi Gururaja Rao
Alan Dale Woodlief III

Valedictorians
(4.0 GPA)

Abeer Altaf
Thomas Vance Barnette
Joshua Berry Carpenter
Jacob Thomas Dremann
Peter Louis Girouard
Andrew D. Hayes
Samuel Henderson
Michelle Kaye Lemons
Adam Christopher Luck
Richard Drew Marshburn
Logan Thomas McMillan
Robert Joseph Montgomery
Evan Murphy
Ryan Charles Quistorff
Peter Nathaniel Shore
James Tucker Wall
Garrett Collin Watts
Alan Dale Woodlief III

Undergraduate Scholarships

Aspirations in Computing School: Melissa Kay Novitsky

Bowman/Ben Franklin Scholarship: Meghana Subramaniam

Bowman/Brian P. Block Memorial Scholarship: Michelle Kaye Lemons

C. R. Rhodes/Ben Franklin Scholarship: Hayden V. Lawrence

Carol Miller Student Leadership: Malik Alexander Majette

Charles L. Tate Endowed Scholarship: Michelle Kaye Lemons

David P. Harris Sr. Scholarship: William J. Glas

Diversity in CSC: Amy Suh, Meghana Subramaniam

Dr. Carl C. Hughes Scholarship: Ashley Nicole Cook

Dr. Donald L. Bitzer Creativity Award: Meghana Subramaniam,
Alan Dale Woodlief III

Dr. K. C. Tai Memorial Scholarship: Ashley Nicole Cook,
Michelle Kaye Lemons

Edward R. Short Engineering Scholarship: Devonte Nobel Dereef

Undergraduate Scholarships

(continued)

Goodnight Scholarship: Taylor Mackenzie Floyd, Quadedria Y. Jones, Lahari Revuri, Hayley S. Russell, Caeman Toombs, Richard Alan Trevorrow

Gordon Family Scholarship: Connor Hall

J. M. Davis/Ben Franklin Scholarship: Joseph Warren Stanley

John Deere Scholarship: Ashley Nicole Cook

Mary Lee Taylor Memorial Scholarship: Michael Sirio

NC-SIM Scholarship in Computer Science: Aaron Alexander Watson

NCSU STEM Scholarship: Catherine Alexandra Lumsden, Melissa Kay Novitsky

R. A. Gregg, Jr. Memorial Scholarship: Jacob Thomas Dremann

SAS Institute Computer Science Fund: Amy Suh

Siemens Healthineers: Brian Morris, Richard Trevorrow

White Carson Scholarship: Michelle Kaye Lemons

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Tzvetelina Battestilli, Ph.D.
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Min Chi, Ph.D.
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Anupam Das, Ph.D.
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Jami Boylan
Marcus Bullett, B.S.
Veronica Cateté, Ph.D.
Tammy Coates, B.A.
Kirby Culbertson, M.S.
Marhn Fullmer, B.S.
Todd Gardner
Christopher Gurley, B.S.
James Hall, M.S.
Linda Honeycutt
Ann Hunt, M.S.
Melissa Jeans, M.S.
Darla Kremer, Ph.D.
Seung Lee, Ph.D.
Barry Liu, B.S.
Kathy Luca, B.B.A.
Terri Martin-Moss

Wookee Min, Ph.D.
Bradford Mott, Ph.D.
Trey Murdoch, B.S.
Tyler Puckett, B.S.
Leslie Rand-Pickett, M.Ed.
Donna Richards, B.A.
Jonathan Rowe, Ph.D.
Wendy Shearon, B.S.
Andrew Sleeth, B.A.
Peter Smith, M.S.
Randall Spain, Ph.D.
Kenneth Tate, B.A.
Robert Taylor, M.S.
Sandra Taylor, M.S.
Zelda Tuazama, B.S.
Susan Uy, B.A.
Gary Weinberg, Ed.D.
David Wright, Ph.D.
Wenxin Zhang, M.A.

Marshals

Oscar Molina, *junior*
Anam Navied, *junior*
Neill Robson, *senior*
Lauren Siegel, *junior*
Claire Stewart, *junior*
Courtney Weglar, *senior*

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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NC State Engineering Foundation

for sponsoring our Spring 2019
diploma ceremony. Their generous
support benefits the students, faculty,
and staff of the department.

Our sponsors join us in congratulating the
Spring 2019 North Carolina State University
Computer Science graduates.