NORTH CAROLINA STATE UNIVERSITY



SPRING DIPLOMA CEREMONY

DEPARTMENT of COMPUTER SCIENCE

Thursday, May 10, 2018 William Neal Reynolds Coliseum 6:00 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 1,600 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.

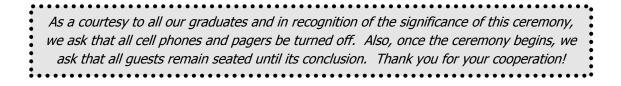
The ceremony today recognizes the academic achievements of the Spring 2018 graduating students receiving bachelor's, master's, or doctoral degrees in the field of computer science. It is a very special, auspicious, and exciting day for all of us -- students, their families and friends, and our faculty and staff, that culminates years of hard work and dedication for all concerned. Students graduating today bring the number of our alumni to over 9,300.

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,

Laurie Williams Interim Department Head





SPRING DIPLOMA CEREMONY

William Neal Reynolds Coliseum Thursday, May 10, 2018 6:00 P.M.

Pre-Processional CommentsKen Tate Director of Engagement and External Relations
ProcessionalPomp and Circumstance Sir Edward Elgar
Welcome Laurie Williams, Ph.D. Interim Department Head
Speaker
Introduction of Honor Students, Faculty and Staff Dennis R. Bahler, Ph.D. Director of Undergraduate Programs
Presentation of DegreesGeorge Rouskas, Ph.D. Director of Graduate Programs
Barbara J. Adams, Ph.D. Director of Advising
Laurie Williams, Ph.D. Interim Department Head
RecessionalTriumphal March From Aida <i>Giuseppe Verdi</i>

GUEST SPEAKER Kimberly Calhoun



Kimberly Calhoun is the COO of **MoneyMasters** TV and Network, CEO and Founder of CAP Science Labs, and the inventor of Guardianator.

Kim is an engineer, a serial entrepreneur, and a TV Host for **Money Masters** on BIZTV where she interviews some of the world's leading CEO's, Money Experts and Authors in roundtable discussions. She has 30 plus years' experience building profitable business organizations from startup ventures, acquisitions, turnarounds, and high-growth organizations.

She began her career in 1984 as a Telecom Engineer, where she was part of implementing new technology and establishing new standards which are currently used today, including broadband with the North Carolina Information Network Highway. In most jobs, she was the first and only female hired. She studied Japanese for two years at NC State to improve her communication skills with her colleagues when she was employed with Fujitsu. She worked in high-tech sales managing 16 states in the South East where she developed zero dollar territories into million dollar territories and managed government contracts.

In 1999, on a dare, she started a small telephone company, obtaining all the licenses herself, and operated in over six states successfully. She was very instrumental in improving the laws and the filing procedures with the PUC and was the first company to achieve approval to operate in a whole state. She has documented success in obtaining a \$138M VC for a fiber project which she did in a sevenminute pitch.

In 2010, she sold the telecom licenses for her business and was planning to retire when she saw a disturbing problem involving domestic violence victims in the criminal justice system. She has since invented and patented a new use of technology to enforce protective orders, by providing law enforcement with admissible evidence and a means to intervene when orders are violated. With a working prototype and a perfect team, her invention is now part of a bigger project with National Institute of Standards Technology (aka NIST) and Smart cities. Since solving the indoor tracking issues last year, her invention has been recognized by other industries as a means to provide safer work environments and to help prevent accidents and fatalities. It is presently being launched in the oil industry this June in Texas. She has also stayed current in the cyber security industry where she speaks about solutions and works as a private consultant.

Kim is a very active and engaged member of the department's Strategic Advisory Board.

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.

SCOTT CARPENTER

Dissertation: Advancing Connected Vehicle Technologies by Improving Vehicular Channel Model Accuracy and Safety Performance Measures

Committee Chair: Mihail Sichitiu, Ph.D.

Scott Carpenter grew up in Wheeling, WV. He received his B.S. and M.S. degrees in Computer Engineering from Case Western Reserve University, in Cleveland, Ohio, in 1989 and 1993, respectively. He earned the Project Management Professional (PMP) certification in 2003.

After completing his M.S. degree, Scott moved to Raleigh, NC in pursuit of software engineering opportunities, before enrolling in the Ph.D. program in Computer Science at NC State. While completing his Ph.D., he continued working full-time in various roles in software development and college instruction.

His dissertation advances communications between vehicles by improving wireless channel model accuracy and improving safety performance measures. During his Ph.D. studies, Scott published five conference and workshop papers, and earned a 4.0 GPA. His research interests include wireless networking to improve vehicular safety, data analytics, software engineering metrics, and process optimizations.

Upon completing his dissertation, Scott plans to continue working at Cisco Systems and living in the Raleigh area with his family.

VERONICA M. CATETÉ

Dissertation: A Framework for the Rapid Creation of Quality-Assured Programming Rubrics for New K-12 Computer Science Teachers

Committee Chair: Tiffany Barnes, Ph.D.

Veronica Cateté completed her B.S. degree in Computer Science at NC State in just 3 1/2 years. Pivoting from personal tragedy, she found her passion for broadening participation in computing through games. Veronica earned her M.S. from UNC Charlotte, with a concentration in Mobile Game Development.

She completed her Ph.D. studies back at NC State, developing an innovative technique to train novice high school Computer Science Principles teachers how to facilitate student learning through formative feedback on creative programming assignments. During her Ph.D. studies, she won back-to-back best paper awards and reached over 1000 students through computing outreach.

Veronica has since begun her new position as a Research Scientist in the Game2Learn Lab, continuing to improve computer science education in K-12 STEM classrooms.

SEOKYONG HONG

Dissertation: Graph Analytics on Modern Graph Processing Systems

Committee Chair: Raju Vatsavai, Ph.D.

Seokyong grew up in Seoul, South Korea, where he received his B.S. and M.S. degrees in Computer Engineering from Hansung University in Seoul.

He moved to Raleigh, NC to complete his Ph.D. of Computer Science at NC State. During his Ph.D. studies, he tested and developed several graph analysis algorithms on modern analysis systems under the support of Oak Ridge National Laboratory. He was honored with an R&D award in 2016.

Upon completing his Ph.D., he will continue his work as a Postdoctoral Researcher at NC State.

JOHN J. MAJIKES

Dissertation: Computational and Design Techniques for a Semi-Autonomous Computerized Dog-Training System with Timing and Accuracy Performance Comparable to a Professional Dog Trainer

Committee Chair: David Roberts, Ph.D.

In the 1980s, John earned a B.S. in Computer Science from Penn State University and a M.S. in Computer Science from Binghamton University. After a long career as a software engineer and surviving cancer, John made the decision to go back and earn his Ph.D. John's cancer survival was due in part to advances in cancer research and John wanted to pay back that research by doing research that helped others.

John's first research project was software quality in medical devices where he worked on the Artificial Pancreas, a closed-loop computer controlled insulin pump for diabetics. His final research project is a semiautonomous computer system that trains dogs. John plans to continue his research with local service dog providers to use the computer to train dogs and lower the cost of service dogs such as Diabetic Alert Dogs or PTSD Dogs.

Along with helping others through his research, John plans one day to teach Computer Science. John hopes to continue his parents' and grandparents' emphasis on education as a means to reach life's goals. Leveraging his years of industry experience, John hopes to train women and minorities for careers in advanced technology.

John's son, Jacob, will also walk at graduation earning a Ph.D. in Material Science Engineering.

CHANGSUNG MOON

Dissertation: Predictive Modeling of Complex Graphs as Context and Semantics Preserving Vector Spaces

Committee Chair: Nagiza Samatova, Ph.D.

Changsung Moon grew up in Busan, South Korea, where he received his B.E. degree in Computer Engineering from the Dong-A University. He also received his M.S. degree in Information and Computer Science from the University of California, Irvine. Before his Ph.D. program, he worked for Samsung Electronics as a Software Engineer and Oregon State University as a Faculty Research Assistant.

Changsung moved to Raleigh, NC in 2014 to complete his Ph.D. at NC State. His dissertation developed new data mining methodologies with regards to predictive analysis: Prediction of users' actions and inference of missing data in the knowledge graph. During his Ph.D. studies, he published six papers about data mining.

He will continue working at NC State as a Postdoctoral Researcher for a rare disease project. He currently lives in Cary, NC.

MICHAEL O'BRIEN

Dissertation: A Multifaceted Approach to Improving the Practicality of Structural Graph Algorithms

Committee Chair: Blair Sullivan, Ph.D.

Michael P. O'Brien was born in Warren, OH and grew up in Strongsville, OH. He attended the University of Notre Dame and majored in Computer Science, with a minor in Chinese.

Immediately after graduating from Notre Dame, Mike enrolled in the NC State Computer Science Ph.D. program and received his en-route M.S. degree in December 2015. His dissertation research, advised by Dr. Blair D. Sullivan, focused on bridging gaps between theoretical advances from the parameterized algorithms community and practical concerns of the network science community.

After graduation, Mike will move to Pittsburgh to work at Google. He is thankful for his friends, colleagues, and mentors in the CSC Department and will look back fondly on the time he spent in Raleigh.

THOMAS WILLIAM PRICE

Dissertation: *iSnap: Data-Driven Support for Novice Programming Informed by Evaluations of Hint Quality and Investigations of Student Help-Seeking Behavior*

Committee Chair: Tiffany Barnes, Ph.D.

Thomas Price grew up in Chapel Hill, NC. In 2013, he received his B.S. in Computer Science from Elon University, where he pursued research on educational games and graduated at the top of his class. This experience led him to pursue a Ph.D. at NC State, working with Dr. Tiffany Barnes.

His dissertation focused on applying AI and data mining to Computing Education Research. As part of this work, Thomas developed an educational programming environment called iSnap, which provides hints and feedback to students automatically, using a novel, data-driven algorithm. He studied how to make data-driven hints more effective by measuring hint quality and understanding students' help-seeking behavior, resulting in more than a dozen publications.

Thomas' future holds multiple exciting possibilities, and each involves continuing to research how to create more effective technology for computing education.

STEPHEN MICHAEL RANSHOUS

Dissertation: Scalable Algorithms for Mining Dynamic Graphs and Hypergraphs with Applications to Anomaly Detection

Committee Chair: Nagiza Samatova, Ph.D.

Stephen was born and raised in Palm Bay, Florida. In 2009 he moved to Gainesville to attend the University of Florida, ultimately earning a B.S. in Computer Science and a minor in Electrical Engineering.

Stephen moved to Raleigh, NC in 2013 to pursue a Ph.D. in Computer Science at NC State. His dissertation focused on developing efficient methods for anomaly detection in large-scale dynamic graphs. During his Ph.D. studies, he had research appointments at Argonne National Laboratory and Pacific Northwest National Laboratory.

After successfully defending his dissertation, Stephen moved to Silicon Valley to work for Google. He is part of the Proactive Search Team and is working on improving the quality of the ranking algorithm and user journey in the Feed.

WENZHAO ZHANG

Dissertation: A Memory-Hierarchy and Network Topology-Aware Framework for Runtime Data Sharing at Scale

Committee Chair: Nagiza Samatova, Ph.D.

Wenzhao Zhang enrolled into the Computer Science Ph.D. program at NC State in Fall 2013. His dissertation focused on how to enhance data sharing performance on supercomputers at scale, by exploring memory-hierarchy and network topology of those powerful machines. His advisor was Dr. Nagiza Samatova.

During his Ph.D. studies, he had worked as an intern at Berkeley National Lab during the Summer of 2015 and 2016. He also was an intern at Renaissance Computing Institute for over six months during 2017. Given the rich academic environment of NC State and those labs, he had published several high-profile research papers.

After finishing his Ph.D. studies, he has started working as a Software Developer at LinkedIn. He began working on the Search-Infrastructure Team of the company, focusing on how to efficiently manage large scale data over data centers around the world.

MASTER of SCIENCE

THESIS

Charles Eric Wimberley

PeakPass: A Machine Learning Approach for ChIP-Seq Blacklisting Chair: Steffen Heber, Ph.D.

MASTER of SCIENCE

NON-THESIS

Angelyn Arputha Babu John Brian Clee Zachary Cleghern Wei Fu Yifan Guo Esha Sharma Ashwin Shashidharan Brandon Thorne Jennifer Tsan

MASTER of SCIENCE in COMPUTER NETWORKING

NON-THESIS

Joshua Mann Mrunal Mozarkar Rishabh Rathore Anthony Thomas Scalabrino

MASTER of COMPUTER SCIENCE

Pinakin Abhyankar **Omkar Acharya** Aayush Sushil Agarwal Sachin Ahuja Tyler Rexford Albert Smit Anand Aravind Anantha Aswin Anil Kumar Muhammad Ammar Ansari Abhilash Arivanan Aniruddha Attili Chinmoy Baruah Prerit Bhandari Darshak Harisinh Bhatti Sudipto Biswas Seth Butler Anshul Chandra Vaibhav Webb Chawla **Piyush Choudhary** Abhinav Choudhury Jordan Cousins Akeem Cox Adam Crowell Chandrashekar Dashudu **Robert Dates** Venkata Anudeep Varma Datla Pankti Rakeshkumar Desai Zankruti Desai Udit Deshmukh Xiangging Ding

Nathan Faulkner Guilherme Ferreira Pranav Firake Harshal Gala Ankur Garg Rushikesh Ghatpande Anshuman Goel Tanmay Goel Samuel David Gonsalves Aakarsh Gopi Pooja Gosavi Sahithi Guddeti Manoj Sharan Gunasegaran Sagar Gupta Sushant Gupta Harshal Gurjar Divya Guttikonda Charles Haithcock Jiaxi He Siddharth Heggadahalli Andrew Hill Eric Horton Xingyao Huang Te I Karan Jadhav Arun Jaganathan Rishi Arun Jain Govardhan Reddy Jalla Abhimanyu Jataria Jeris Alan Jawahar

MASTER of COMPUTER SCIENCE

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Shashank Jha Melwin Jose Bijo Joseph Amit Kanwar Bhavesh Kasliwal Sarat Kavuru Gautami Khandekar Ayush Kumar Jitin Kumar Sohan Kunkerkar Sharmin Lalani **Dustin Lambright** Zhiren Lu Anubhab Maiumdar Ruthvik Mandava Vivek Mani Mehak Maniktala Chinmay Manjunath **Kyle Martin** Dakota Medd Rutvij Mehta Michael Meli Fuzail Misarwala Kushagra Mishra Dinesh Prasanth Moluguwan Krishnamoorthy Michael Alvin Moran Anuraaq Motiwale Bharat Mukheja Shubham Munot

Mukundram Muraliram Nisha Nagasimha Parag Nakhwa Rohit Nambisan Vignesh Nandakumar Nivedita Natarajan Kushal Nawalakha Tyler Orr Sai Krishna Panakanti Vikas Pandey Mitkumar Harendrakumar Pandya Akshit Patel Khelan Patel Kshitij Patil Ajay Chandra Pendyala Sandeep Pilania Kai Presler-Marshall Abhinav Rai Chandrasekar Rajasekar Shyamsunder Ramakrishnan Prashanth Ramesh Jaydeep Rane Gokkulasudan Rathnakumar **Daniel Reinheimer** Chinmay Rudrapatna Sourabh Saha Ashis Sahoo Sachin Saligram Mohit Sardar

MASTER of COMPUTER SCIENCE

(continued)

Dhananjay Sathe Ankur Saxena Preston Dickinson Scott Mateenrehan Shaikh Nikhil Sharma Siddharth Sharma Sumer Vivek Shende Shrikant Shete Satvik Shetty Li Shi Akanksha Pramod Shukla Abhishek Kumar Singh Akanksha Singh Navjot Singh Sukhdev Singh Bhaskar Sinha **Rishabh Sinha** Animesh Sinsinwal Dharani Srinivasan

Sumit Srivastava Yuchen Sun Hengjin Tan Bhushan Thakur Zachery Thomas Sz Ting Tzeng Neela Niranjani Vengateshwaran Gautam Verma Ruchika Verma Jianxun Wang Zhipeng Wei Inderjeet Yadav Shriyansh Yadav Shama Yazdani Qiufeng Yu Chen Zhao Weiiie Zhou Wenxuan 7hu

GRADUATE AWARDS & FELLOWSHIPS

Best Paper Award at the 2017 IEEE International Conference on Big Data: HyeongSik Kim

Best Paper Award at the 15th International Conference on Privacy, Security and Trust (PST): Nirav Ajmeri,

Karthik Sheshadri

- Best Paper Award at the 38th IEEE Sarnoff Symposium: Angelyn Arputha Babu John
- **COE Dean's Doctoral Fellowship:** Andrew Emerson, Jordan Jueckstock
- **COE Graduate Merit Award:** Abida Haque, Bethany Janos, Jordan Jueckstock, Brian Lavallee, Nathan Pool
- **COE Graduate Research Award:** Sheikh Nasif Imtiaz, Brian Lavallee, Utsab Ray, Shaohu Zhang, Linfeng Zhou
- **GEM Fellowship:** Robert Dates, Denae Ford, Zachery Thomas

Grace Hopper Conference Attendees: Debosmita Das, Sonal Patil

Graduate Student Leadership Award: Veronica Cateté

High Performance Computing Cluster (HPCC) Systems Summit Community Day: Chin-Jung Hsu, George Mathew, Vivek Nair Masters Research Award: Eric Horton

Mentored Teaching Assistantship (MTA) Award: Adam Gaweda, Debanjana Nayak

Microsoft Ph.D. Research Fellowship: Denae Ford

National Defense Science and Engineering Graduate (NDSEG) Fellowship: Timothy Goodrich

National Science Foundation Graduate Research Fellowship: Denae Ford, Sean Mealin

NCSU Doctoral Dissertation Completion Grant: Titus Barik

NextProf Fall Engineering Workshop: Denae Ford

Outstanding Dissertation Award: Veronica Cateté, Yufei Ding

Outstanding Research Award: Aurora Peddycord-Liu, Markus Eger

Outstanding TA Award : Tripti Samal, Tyler Stocksdale

Phi Kappa Phi Honor Society: Zifan Nan

Provost Fellowship: Abida Haque

University Graduate Fellowship: Sasha Azad, Xiaoting Fu, Zengqi Qiu

BACHELOR of SCIENCE

Akhil Chandrashekhar Acharya *** Mohammed Safi Ahmed Forster Francesco Amatori Nicholas Richard Anthony ** Γ Savannah C. Arnette *** Morgan J. Arrington ** Nicholas E. Ashley Janne Louise Francisco Ave * @ Keng-Hui Daniel Beall * Jordan Alexander Beichler *** Collin Esdras Benoit Chirag Bhikhalal Bhesaniya ** Alan David Bishel ** Raymond Warren Black *** Zachary Thomas Brownlow *** F Anthony Michael Burns Salvatore Paul Camassa Daniel John Cary *** John-Michael M. Caskey *** Siu Kei Chan + Xiao Cheng * Aaron Moran Cheshire *** Anne Louise Church * Jacob Everett Clark Wesley Ray Coats @ Corey James Colberg ** Russell Neal Creswell *** F Austin William Crismore * Γ Nathaniel Ryan Crist *** + Connor D. Crothers **

Nicole Marie Croutwater * Daniel Denton Josue Miguel Diaz * Justin Anthony Drum *** Jonathan Thomas Easow ** Hunter Thomas Enoch Andres Guillermo Escobar *** Samuel Joseph Fedeler *** + Angela Jane Felion ** Nicholas Gardocki ** Matthew C. Gibson Edward Jonas Phillips Gilliam James Chandler Gonzales *** Joshua Eli Good ** Γ James Deeter Henderson Kaveen Madushanka Herath Bandara ** + Madison Elizabeth Hess @~ Aaron James Hiller Nicole L. Hlebak *** Brian Michael Hogan Yiing-Jye Huang * Ahmad Husein John Alvin Hutcherson Jacob Benjamin Inkrote *** Tyler James Irons * Devan Lynn Isaac ** Kenneth Gregory Jones *** Thomas G. Josephson * @ Pratik Khanal ** Sean Patrick Kilgannon

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(continued)

Felix Leo Kim *** Caroline Audine Law @~ Alexander Loren Lee ** Evan Li *** Jesse Austin Liddle Matthew Jonathan Lilly Sriya Madapusi Vasudevan ** Jacob David Malter * Christina Ashly Mara * Zachary Nash Martens * Santosh C. Mathew *** Wyatt E. Maxey * Justin Anthony Mazzola ** Nikolas McGovern *** Christopher Jeffrey Miller *** Γ Seyedsamim Mirhosseini Ghamsari *** Susanna Moneta * Wade Patrick Moore ** Jon William Morris ** Hasham Mukhtar ** Kyle Brennan Mulleady ** Marvin Wayne Newlin ** + Brandon Thanh Nguyen * Melissa Kay Novitsky *** @~ Justin Santos Ordonez * F Shruti P. Patel Michael Robert Patlovich Thomas Paul Petrovich ** Robert Norman Pettit Jr. Samuel James Rappl **

William Clark Rea Joshua Marsh Rees-Jones *** Mitchell Westwick Rees-Jones *** Eric Reinstein ** Abigail Leigh Richman * Matthew Farnum Rosenbloom *** Shawn Hunt Shadrix Sarah Anne Shope *** Jean-Claude Shore *** + Andrew Joseph Shryock * Matthew Christopher Simpson*** + Marshall Alan Skelton Jr. Harold Thomas Slaughter III Peter Andrew Soloninka ** Anthony J. Strapp Robert Henry Tapp Gene Allen Todd II F Selena Nicole Turner ** Vasil Uhnyuck * Noah Gabriel Unger ** Matthew Paul Watkins ** Zhihan Wei Stuart Allen Wells *** Jack E. Wingo + Brent Younce ** Shenkai Yu ** Tao Yu * Renata Ann Zeitler *** Andrew Zhang ***

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.
- 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

Louis Le

Computer Science Senior Award for Scholarly Achievement

Jacob Clarence Stone

Park Scholars

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

James Chandler Gonzales

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.

Akhil Chandrashekhar Acharya

Text Analytics for Android Security Honors advisor: William H. Enck, Ph.D.

Jordan Alexander Beichler

Framework for Bulk Analysis of Third Party iOS Applications Honors advisor: William H. Enck, Ph.D.

Joshua Eli Good

Educational Proficiency through Simulated Environments: Exploring the Effects of Virtual Reality on Player-Character Association Honors advisor: Tiffany Barnes, Ph.D.

Kaveen Madushanka Herath Bandara

Real Time Narrative Computing Honors advisor: Christopher Healey, Ph.D.

Jacob Benjamin Inkrote

FuseMuse Honors advisor: Matthias Stallmann, Ph.D.

Felix Leo Kim

Bio-inspired Computation with Julia Honors advisor: Steffen Heber, Ph.D.

Sriya Madapusi Vasudevan

VersionBot Honors advisor: Christopher J. Parnin, Ph.D.

Seyedsamim Mirhosseini Ghamsari

Dynamic Time Warping with Varied Data Sets in Education Honors advisor: Min Chi, Ph.D.

Thomas Paul Petrovich

Dynamic Time Warping with Varied Data Sets in Education Honors advisor: Min Chi, Ph.D.

Samuel James Rappl

FuseMuse Honors advisor: Matthias Stallmann, Ph.D.

Mitchell Westwick Rees-Jones

Secrets of Industrial Data Mining Honors advisor: Timothy Menzies, Ph.D.

Jean-Claude Shore

Structural Sparseness and Spectral Graph Theory Honors advisor: Blair D. Sullivan, Ph.D.

Brent Younce

Network Attacks and Automated Network Response Honors advisor: Douglas Reeves, Ph.D.

Renata Ann Zeitler

CSC 216 Lab Impact Honors advisor: Sarah Heckman, Ph.D.

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 sixcredit "Capstone Experience", and maintain a cumulative GPA of 3.25 or higher.

> Kaveen Madushanka Herath Bandara Nicole L. Hlebak Jacob Benjamin Inkrote Samuel James Rappl Joshua Marsh Rees-Jones Mitchell Westwick Rees-Jones Jean-Claude Shore

Valedictorians

(4.0 GPA)

Zachary Thomas Brownlow Aaron Moran Cheshire Samuel Joseph Fedeler James Chandler Gonzales Nicole L. Hlebak Jacob Benjamin Inkrote Jean-Claude Shore Matthew Christopher Simpson Andrew Zhang

Undergraduate Scholarships

Charles W. Kelly/Raleigh ISSA Scholarship: Jacob Clarence Stone CSC 40@40 Scholarship: Elizabeth V. Gilbert Donald C. and Doris J. Martin Scholarship: Anne Louise Church Donald L. Bitzer Creativity Award: Hanna Fernandez, Louis Le Dr. K. C. Tai Memorial Scholarship: Julius Austin Kollar Duke Energy CSC Scholarship: Dana B. Christo Joyce Hatch Scholarship: Stephen Eugene Worley Mark Paul Kavanaugh Memorial Scholarship: **Christopher Jeffrey Miller** Network Appliance (NetApp) Scholarship: Savannah C. Arnette Renee and Stan Katz Scholarship: Wade Patrick Moore SAS Institute Endowed Scholarship: Julius Austin Kollar, Thomas D. Ortiz SAS Insitute Minority Scholarship: Dana B. Christo

Worley & Callie Clark Scholarship: Julius Austin Kollar

HONORING OUR RETIREES



Dr. William Stewart Professor

Dr. Stewart received his Ph.D. from Queen's University of Belfast, Northern Ireland in 1974. Dr. Stewart's research interests include Markov Chains: Modelling and Analysis; Performance Evaluation of Computer Systems and Communication Networks; and Scientific Computing: Numerical Linear Algebra. Dr. Stewart served as the Director of Graduate Programs for five years until 1991. He also was the Director of Operations Research at NC State from 1996 to 2000. In 1991 he received the NCSU Advocacy Award presented by the NCSU Association for the Concerns of African-American Graduate Students. This award is presented annually to a Dean, Department Head or Program Director for "going beyond the call of duty in promoting the presence of African-Americans on the NCSU Campus." In 1992 Dr. Stewart received the NCSU Innovator Award in recognition of the outstanding contribution made in the transfer of technology to the public from NC State. He was an assistant to Dr. Rouskas, Director of Graduate Programs, with responsibility for all Master of Science and Master of Computer Science students until his phased retirement. During his tenure at NC State, he has chaired and/or served on numerous committees.

HONORING OUR RETIREES



Dr. David Thuente Professor

Dr. Thuente received his Ph.D. from University of Kansas in 1974. Prior to coming to North Carolina State University, he was a faculty member for twentyseven years at Purdue University at Fort Wayne. He is a Professor Emeritus of Purdue University. Dr. Thuente's research interests include Rendezvous Algorithm for Cognitive Radios; Wireless Network Modeling and Performance Evaluation; Artificial Intelligence and Intelligent Agents; Cyber Security; and Scientific and High Performance Computing. Dr. Thuente served as the Assistant Department Head for two years. He also served as the Director of Graduate Programs for seven years until 2010. During his tenure at NCSU, he has chaired and/or served on numerous committees for the department, the College of Engineering, and NCSU. Awards that Dr. Thuente has received include: *Most Helpful Professor Outside of Class*, presented by ACM/AITP; *Outstanding Director of Graduate Programs*, presented by Graduate Student Association of the Department of Computer Science; *The Joyce Hatch Service Award*, presented by ACM/AITP; Best Paper Awards, and an *IBM Faculty Award*.

The faculty and staff of the Department of Computer Science at N.C. State wish to extend our deepest gratitude and appreciation to Drs. Stewart and Thuente who are retiring this academic year.

COMPUTER SCIENCE FACULTY

Barbara J. Adams, 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. Jon Doyle, Ph.D. Patrick Dreher, Ph.D., M.B.A. Rudra Dutta, Ph.D. William Enck, Ph.D. Vincent W. Freeh, Ph.D. Edward F. Gehringer, Ph.D. Michelle Glatz, M.S. 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. Arnav Jhala, Ph.D. Guoliang Jin, Ph.D. Alexandros Kapravelos, Ph.D. Jason King, Ph.D. Michael Kowolenko, Ph.D. Dana Lasher, B.S. James C. Lester, Ph.D. Collin Lynch, Ph.D. ToniAnn Marini, M.Ed.

Chris Martens, Ph.D. Timothy Menzies, Ph.D. Frank Mueller, Ph.D. Emerson Murphy-Hill, Ph.D. Kenya Oduor, Ph.D. Oscan Ozturk, Ph.D. Christopher Parnin, Ph.D. Harry Perros, Ph.D. Michael Rappa, Ph.D. Bradley Reaves, Ph.D. Douglas S. Reeves, Ph.D. David L. Roberts, Ph.D. George N. Rouskas, Ph.D. Nagiza Samatova, Ph.D. Carla D. Savage, Ph.D. Alessandra Scafuro, Ph.D. Jessica Schmidt, Ph.D. Muhammad Shahzad, Ph.D. Xipeng Shen, Ph.D. Munindar P. Singh, Ph.D. Robert St. Amant, Ph.D. Matthias Stallmann, Ph.D. William J. Stewart, Ph.D. Kathryn T. Stolee, Ph.D. David Sturgill, Ph.D. Blair D. Sullivan, Ph.D. David J. Thuente, Ph.D. Hung-Wei Tseng, Ph.D. Raju Vatsavai, Ph.D. Mladen A. Vouk, Ph.D. Benjamin Watson, Ph.D. Laurie Williams, Ph.D.

COMPUTER SCIENCE STAFF

Carol Allen John Bass, M.S. Carlos A. Benavente, M.S. Jami Boylan Andrew Brown, M.S. Marcus Bullett, B.S. Veronica Cateté, Ph.D. Tammy Coates, B.A. Camille Cox, B.S. Kirby Culbertson, M.S. Jeanette DiScala, Ph.D. FNU Ferry, Ph.D. Marhn Fullmer, B.S. Todd Gardner Christopher Gurley, B.S. James Hall, M.S. Linda Honeycutt Ann Hunt, M.S. Melissa Jeans, M.S. Meaghan Johnson, B.S. Oriana Johnson, M.S. Ryan Kilby

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Marshals

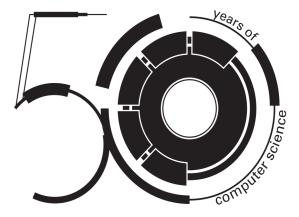
Apeksha Awasthi, *B.S. senior* Veeha Khanna, *M.S. student* Malik Majette, *B.S. senior* Deepthi Rao, *B.S. junior* Neill Robson, *B.S. sophomore*

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.

This program is prepared for informational purposes only. The appearance of an individual's name does not constitute the university's acknowledgment, certification, or representation that the individual has fulfilled the requirements for a degree.



The North Carolina State University Department of Computer Science celebrates 50 years of excellence in teaching and research this year. Founded in 1967, the department is one of the oldest recognized computer science departments in the nation. **The Department of Computer Science thanks**





and

NC State Engineering Foundation

for sponsoring our Spring 2018 diploma ceremony. Their generous support benefits the students, faculty, and staff of the department.

Our sponsors join us in congratulating the Spring 2018 North Carolina State University Computer Science graduates.