Primary Author	Faculty Advisor	Title	CoAuthor 1	CoAuthor2	CoA
COLLEGE OF AGRICULTURE AND HUMAN ECOLOGY					
Agriculture Ph.D. Winner					
Mary Mahan	Dennis Duncan	Industry Leaders' Perceived Critical Thinking Dispositions of Early-Career Employees	Dennis Duncan	Ciana Bowhay	
Agriculture Undergraduate Winner					
Aaron Lay	Dennis Duncan	Expanding Water Line Infrastructure to Rural Residents of Putnam County, Tennessee			
HUMAN ECOLOGY UNDERGRAD WINNER 1					
Cidney Woodard	Allison Coutinho	Effects of Probiotic Implementation on Women with Anorexia Nervosa			
HUMAN ECOLOGY UNDERGRAD WINNER 2					
Maggie clem	Rufaro Chitiyo	Ways Teachers Accommodate Children with Sensory Processing Disorder Needs in the Classroom			
COLLEGE OF ARTS AND SCIENCES					
BIOLOGY M.S. WINNER					
Anchita Casaubon	Carla Hurt	Examining Snapping Shrimp Morphology Using Geometric Morphometrics in a Phylogenetic Framework			
BIOLOGY UNDERGRADUATE WINNER					
Charis Littell	Shawn Zeringue-Krosnick	Anatomical diversity of evolutionarily convergent egg mimics in passion flowers (Passiflora L.)	Shawn Zeringue-Krosnick		
CHEMISTRY MASTER'S WINNER					
Fortune Dzeagu	Jesse Carrick	Synthesis of pyridinyl-1,2,4-triazinyl-1,3,4-oxadiazole; a soft-Lewis basic ligand towards selective minor actinide extraction in nuclear waste remediation.			
CHEMISTRY PH.D. WINNER					
Bryant Davis	Andrew Callender	Geochemical Fingerprinting of Natural Waters in Tennessee			
CHEMISTRY UNDERGRADUATE WINNER 1 (Tie)					
Shawna Coulter	Amanda Carroll	Metal Ion Removal from Aqueous Solutions using NQSA SC and TSC Chelating Resins			
Connor Pinson	Jesse Carrick	Chemoselective green oxidation of heteroaryl isoprenes toward functionalized methyl ketones.	Alexander Stovall	Zachary Gulledge	
CHEMISTRY UNDERGRADUATE WINNER 2 (Tie)					

Chance Morris	Amanda Carroll	Water Remediation Utilizing ISA, TSC, and SC			
Sydney Asmus	William Carroll	Synthesis of a novel Terpenoid and optimization of its preparation for yield and environmental impact using Design of Experiment (DOE)	Taylor Fletcher		
EARTH SCIENCES MASTER'S WINNER					
Madison Moffitt	Peter Li	A Method for Mapping Environmental Justice Factors by Watershed			
EARTH SCIENCES UNDERGRADUATE WINNER					
Joel Baker	Michael Harrison	Microstructures in faulted sandstone near Spencer, Tennessee	Alyssa Oldfather	Michael Harrison	Holly Str
ENGLISH MASTER'S WINNER					
Hayle Moore	Helen Hunt	Fanny Hill: An Eighteenth Century Bisexual Woman			
ENGLISH UNDERGRADUATE WINNER					
Christopher Fairchild	Kristen Deiter	Is King Richard a True Machiavellian? Comparing The Prince to The True Tragedy of Richard The Third			
FOREIGN LANGUAGES UNDERGRADUATE WINNER					
Daniel Frost	Martin Sheehan	Industries of Vice: Alcohol, Tobacco, and COVID in Germany			
HISTORY UNDERGRADUATE WINNER					
Summer King	Allen Driggers	The European Question in America, 1861-1865			
MATHEMATICS MASTER'S WINNER					
Sydney Clere	Amy Chambers	An Introduction to Wavelets and Multiresolution Analyses with an Application to Digital Signal Processing			
PHYSICS UNDERGRADUATE WINNER					
Zachary Hinchman	Mustafa Rajabali	Designing a Laser Ablation Ion Source	Jackson Dittert		
COLLEGE OF EDUCATION					
COUNSELING AND PSYCHOLOGY MASTER'S WINNER					
Lara Strate	Tony Michael	Career decision-making in college students: A path analysis of early childhood attachment, gender, age, and socioeconomic status			
COUNSELING AND PSYCHOLOGY PH.D. WINNER					

Brittney Phillips	Tony Michael	An investigation of the factor structure and psychometric properties of the Adverse Childhood Experiences scale in college students.			
COUNSELING AND PSYCHOLOGY UNDERGRADUATE WINNER					
Livia James	Nicole Henniger	Examining the Relationship Between Identity and Shame Resilience			
CURRICULUM AND INSTRUCTION PH.D. WINNER					
Adrianne Colquitt	George Chitiyo	The Relationship of Adverse Childhood Experiences, Protective and Compensatory Experiences and Children's Flourishing			
EXERCISE SCIENCE UNDERGRADUATE WINNER					
Noah Schwartz	Michael Phillips	Is there a relationship between lower body power and speed?	Nicholas Haynes		
COLLEGE OF ENGINEERING					
CHEMICAL ENGINEERING MASTER'S WINNER					
Steven Lam	Joe Biernacki	Direct Formic Acid Fuel Cells: Mass Transport Optimization of the Anode Catalyst Layer			
CHEMICAL ENGINEERING PH.D. WINNER					
Anfal Haris	Robby Sanders	Role of Nanocellulose Hydrogels in Regenerative Medicine: Preliminary Observations	Pedro Arce		
CHEMICAL ENGINEERING UNDERGRADUATE WINNER 1					
Isabella Southerland	Pedro Arce	The Syllabus as an Agreement of Cooperation for Course Learning: A Student Perspective			
CHEMICAL ENGINEERING UNDERGRADUATE WINNER 2 (Tie)					
John Clark	Holly Stretz	Synthesis of near-infrared pigments for novel sensor applications	Holly Stretz		
Luke Horne	Pedro Arce	Role of Intermediaries in the Degradation of Acetaminophen by Photocatalytic Methods: Preliminary Observations	Sabrina Hurlock Buer	Dipendra Wagle	Robby Sa
CIVIL AND ENVIRONMENTAL ENGINEERING M.S. WINNER					
Brady England	Alfred Kalyanapu	FLOOD RISK EDUCATION IN THE TRACE CREEK WATERSHED USING HEC-RAS AND ARCGIS STORY MAPS	Maci Arms	John Brackins	
CIVIL AND ENVIRONMENTAL ENGINEERING UNDERGRADUATE					

Caroline Hitchcock	Tania Datta	Microplastics Sampling and Identification in Wastewater Treatment Plants around Middle Tennessee	Justin Murdock	Tania Datta	
Computer Science Master's Winner 1					
Matthew Brotherton	William Eberle	Using Graph-based Knowledge Discovery to Detect Anomalous Patterns in Crime Data			
COMPUTER SCIENCE MASTER'S WINNER 2					
Sharanya Aavunoori	William Eberle	Diagnostic Prediction using Clinical text analysis			
COMPUTER SCIENCE PH.D. WINNER (Tie)					
Daniel Adams	William Eberle	Estimating the Condition of Streams & Rivers: An approach using supervised learning methodologies	Peter Li		
Islam Elgarhy	William Eberle	Data Mining for Cardiovascular Disease Prediction			
COMPUTER SCIENCE UNDERGRADUATE WINNER 1					
Lukas Motykowski	Doug Talbert	Anomaly Detection using Convolutional Neural Networks in Wire Arc Manufacturing			
COMPUTER SCIENCE UNDERGRADUATE WINNER 2 (Tie)					
Brendan Jackson	Maanak Gupta	The Cybersecurity Concerns of Smart Agricultural Vehicles	Conall Fisher	Johnathan Rich	Jalen Sta
Sierra Osborne	Maanak Gupta	Vulnerabilities of Autonomous Vehicles: The Impact Self-driving Technology Has On Our Data and Safety	Sierra Stewart	Jayden Wright	Jonathar
ELECTRICAL AND COMPUTER ENGINEERING M.S. WINNER					
Abiodun Olatunji	Indranil Bhattacharya	AI Based Optimization of Solid State Transformer Core for Modern Electric Vehicles Using Multi-Objective Genetic Algorithm	Indranil Bhattacharya	Webster Adepoju	
ELECTRICAL AND COMPUTER ENGINEERING PH.D. WINNER					
Trapa Banik	Indranil Bhattacharya	Mitigation of Jahn-Teller Effect in P2 type Sodium Iron Manganese Oxide Cathode via Ti and V Doping	Indranil Bhattacharya		
ELECTRICAL AND COMPUTER ENGINEERING UNDERGRADUATE					

Weston Beebe	J.W. Bruce	Novel Conservative Reversible Logic Gate Logic Function Implementations with Minimal Garbage	J. W. Bruce		
Parth Patel	J.W. Bruce	Towards Automated Machine Learning Detection of Academic Dishonesty in Computer-Based Testing	J.W. Bruce		
MANUFACTURING AND ENGINEERING TECHNOLOGY M.S. WINNER					
Mohammad Alshaikh Ali	Ismail Fidan	Optimizing Lattice Infill Structures to Reduce Mass & Power Consumption for Popular 3D Printing Technologies			
MANUFACTURING AND ENGINEERING TECHNOLOGY PH.D. WINNER					
Orkhan Huseynov	Ismail Fidan	Investigation of the thermal properties of various short carbon fiber reinforced polymers in Fused Filament Fabrication process	Ismail Fidan		
Mithila Rajeshirke	Ismail Fidan	Fatigue Analysis of Carbon Fibre Reinforced Composite Components Manufactured by Fused Filament Fabrication	Ismail Fidan		
MECHANICAL ENGINEERING M.S. WINNER					
Andrew Gothard	Steven Anton	A Method to Generate 3D Patient-Specific Total Knee Arthroplasty Tibia Models			
MECHANICAL ENGINEERING PH.D. WINNER					
Reza Nouri	Ahmad Vaselbehagh	Predicting unknown upstream events using Convolutional Neural Network			
MECHANICAL ENGINEERING UNDERGRADUATE WINNER					
Warren Sims	Sally Pardue	Vibration Analysis of a Concrete Slab Floor Using Piezoelectric Accelerometers			
COLLEGE OF INTERDISCIPLINARY STUDIES					
ENVIRONMENTAL STUDIES UNDERGRADUATE WINNER					
Rachel Reed	Steven Sharp	Solar Energy for Bridgestone Nature Reserve at Chestnut Mountain	Samantha Snyder	Ashley Daniel	Luke Fra
INTERDISCIPLINARY STUDIES UNDERGRADUATE WINNER					
Brandon Pierce	Ann Manginelli	The Need for STEM workshops and clubs in Carter County Tennessee			
COLLEGE OF NURSING					
NURSING DNP WINNER					

Heather Cathey	Bedelia Russell	Implementation of an ADHD Electronic Portal in Pediatric Primary Care	
NURSING UNDERGRADUATE WINNER			
Haley Bearden	Lynette Harvey	Ketamine treatment for Veterans with Post Traumatic Stress Disorder	Lynette Harvey