

1. ACADEMIC HISTORY

Name: John M. Mativo
Present Rank: Professor
Proportion Time Assignments: 2019 - Present 40% EFT Inst; 40% EFT Res; 20% EFT Serv
2010 - 2019 50% EFT Instruction; 50% EFT Research
2007 - 2010 60% EFT Instruction; 40% EFT Research

Tenure Status: Tenured (2013)
Graduate Faculty Status: Graduate Faculty – appointed 2007
reappointed 2014, 2018

Degrees: Engineering:
Doctor of Philosophy in Engineering (Mechanical) – University of Dayton, Dayton, OH, 2020 “System Design of Composite Thermoelectrics for Aircraft Energy Harvesting”
Master of Science in Mechanical Engineering- University of Dayton, Dayton, OH, 2006
Bachelor of Mechanical Engineering – Auburn University, Auburn, AL. 1995

Education:
Doctor of Education- University of Georgia, Athens, GA, 1993
“Perception of Leadership Skills: Relationships to Postsecondary Vocational Industrial Clubs of America Participation in Georgia”
Master of Education – University of Georgia, Athens, GA, 1990

Technology:
Bachelor of Industrial Technology – Andrews University, MI (University of Eastern Africa, Baraton Campus, Kenya [UEAB]), 1988

Theology:
Bachelor of Arts [Theology] – Andrews University, MI (UEAB campus), 1987

Academic Positions Held:

Professor: Career and Information Studies (Workforce Ed. [WE]), COE Member: Engineering Education Transformations Institute	2021 – Present
Associate Professor: Career and Information Studies (WE), COE Member: Engineering Education Transformations Institute	2014-2021
Associate Professor: Career and Information Studies (WE), COE Member: Faculty of Engineering, University of Georgia; Athens, GA	2013-2014
Assistant Professor: Workforce Education program, College of Education; Member: Faculty of Engineering, University of Georgia; Athens, GA.	2007 – 2013
Associate Professor: Department of Technological Studies, Getty College of Arts and Sciences, Ohio Northern University (ONU), Ada, OH [Received Tenure 2007]	2005-2007

Assistant Professor: Department of Technological Studies, Getty College of Arts and Sciences, ONU, Ada, OH	2002-2005
Senior Lecturer (Associate Professor equivalent) and Department Chair: Department of Technology, School of Science and Technology, University of Eastern Africa, Baraton, Kenya; Permanent Employee [same as Tenure]	1996 – 2001
Lecturer (Assistant Professor equivalent): Department of Technology; School of Science and Technology; University of Eastern Africa, Baraton, Kenya	1995 – 1996
Other Professional Employment	
Summer Research Engineer/Scientist Contractor – Air Force Research Lab, Dayton, OH [<i>Thermal management</i>]	2009-2014 (May – August)
Research Engineer/Scientist Contractor – Air Force Research Lab, Dayton, OH [<i>Aircraft morphing</i>]	2008 (May – July)
Student Research Assistant: Department of Mechanical Engineering; College of Engineering; Auburn University; Auburn, AL	1993-1995
Graduate Assistant: Department of Trade and Industrial Education; College of Education; University of Georgia; Athens, GA	1990–1993
Graduate Assistant: Vocational Education Materials Center; College of Education; University of Georgia; Athens, GA	1988–1990
Workshop and Garage Manager: Department of Industrial Technology; University of Eastern Africa, Baraton, Kenya	1986–1988
Summer Sales Representative: Skandinaviska Bokforlaget, Stockholm, Sweden	1986–1987
Dairy and Farm Student Worker: Department of Agriculture; University of Eastern Africa, Baraton, Kenya	1982-1986
Secondary School Instructor; Mombasa Seventh-Day-Adventist School, Mombasa, Kenya.	1980-1982

2. INSTRUCTION

2.1 Courses taught at the University of Georgia

Dr. Mativo’s instructional activities range from regular teaching of courses related to students from workforce education and engineering to a doctoral research seminar. As a member of graduate faculty, he supervises masters and doctoral level research/dissertations. He serves or has served as major professor of 15 doctoral students, and has been a committee member for 41 doctoral students, as associate professor (see section 3.5).

Courses taught since Fall 2012–Present (Spring2021): Workforce Education Program & UGA Engineering

Course Title/Description	Enrollment	Credit hrs.
CSEE 2220 (WFED 4990): Logic Design	23	69

EBUS 5050/7050: Introduction to Programing for Workforce Education (JAVA)	4	12
ENGR 1140: Computation Engineering Methods -MATLAB	163	326
ENGR 2130: Engineering Dynamics	1201	3,603
ENGR 4900: Special Topics [Energy Conversion of Prime Mover)	3	6
ETES 2320/2320L: Creative Activities for Teachers & Lab	13	39
ETES 5110/7110 Application of Engineering in Technological Studies	1	3
FYOS 1001: Alternative Energy & Sustainability	118	118
FYOS 1001: Product Design and Innovation	47	47
MCHE 4960H: Undergraduate Research – Energy Harvesting Electric	3	3
WFED 7200/E: Program Evaluation in Workforce Education	41	123
WFED 7005/9005: Graduate Seminar in Workforce Education	11	33
WFED 8010: Workforce Ethics for a Technological World	29	87
WFED 8020: International Workforce Education	12	36
WFED 8320/E: Global Innovation, Technology, and Careers	25	75
WEFD 8990: Action Research	18	54
WFED 9000: Doctoral Research	22	66
WFED 9300: Doctoral Dissertation	10	30
WFED 9630: Cri. of Literature	27	81
WFED 9800: Practicum in Workforce Education	6	18

2.2 Development of new courses

WFED 8320: Global Innovation, Technology, and Careers

Explores theories of innovation, innovation types, technological trends, and associated emerging careers. Through problem-based learning challenges, students will develop an understanding of the design process and the integration of disciplines, such as science, technology, engineering, and mathematics often used to solve real-world problems and drive global innovation.

ENGR 4900: Special Topics - Energy Conversion of Prime Mover

To enable the student to develop skills/understanding of topics on an individual or team basis. To enable the student to develop deeper understanding of a specific engineering topic related to the student’s academic interest. Published paper with students: “*Conversion of a prime mover: One-third scale model-T from gasoline to electric power.*” (ASEE, 2019)

2.3 Supervision of Undergraduate Research

MCHE 4960H: Undergraduate Research – Energy Harvesting Electric – Supervised Aman Luthra in a year long study. Published paper “*Harnessing Drag Energy in Electric Automobiles.*” (ASEE, 2020)

2.4 Student advising

Founding Advisor for UGA Society for Automotive Engineers (SAE)*

2014 – present

Advisor and Co-Advisor for UGA Society of Mechanical Engineers (ASME)

2014 – 2017

*Faculty Advising for UGA SAE now known as UGA Motorsports started with four students and through recruitment and student interest, and relevance to real life work, the club has over 110 students. 80 students work on Formula SAE vehicle which is designed and built from scratch. A competition is held once a year with over 100 universities. 30 students work on the endurance car and two competitions are held each year. In Spring 2020, the University of Georgia, approved UGA Motorsports Formula SAE as an Experiential Learning experience site for students. Since 2018, over 60 Engineering students have used FSAE activities as their Capstone course, with design in the Fall semester and fabrication in the Spring

semester. In summer 2018, 5 students and I participated in the annual FSAE competition in Lincoln, Nebraska. Through student nomination, I was awarded *SAE Outstanding Faculty Advisor* for the 2019 International recognition. In Summer 2021, 11 students and I participated in Brooklyn, Michigan Formula SAE Competition.

2.3 Continuing education

Faculty Success Program
NSF ATE Leadership Capacity Building

January – May, 2017
June, 2014 – June 2015

3. SCHOLARLY ACTIVITIES

3.1 Publications (2013 – 2021)

Chapters in Books

Mativo, J. M. (2021). Robotics Education as an integrator tool. *Educational Media, Technology Yearbook, Vol. 43, RobertMaribe Branch et al. (Eds): Educational Media and Technology Yearbook, 978-3-030-71773-5, 503054_1_En*, (Chapter 4). Springer Nature

Mativo, J. M., Womble, M., and Jones, K. (2013). Engineering and technology students' perceptions of courses. *International Journal of Technology and Design Education*. Vol.23 No. 1. Online ISSN 1573-1804; Print ISSN 0957-7572, pp 103-115.

Journal articles (print)

Mativo, J., Hallinan, K., George, U., Reich, G., and Steininger, R. (2021). "Topology optimized thermoelectric generator: a parametric study" *Energy Harvesting and Systems*.
<https://doi.org/10.1515/ehs-2021-0002>

Mativo, J. M. & Hallinan, K (2017) Development of Compliant Thermoelectric Generators (TEGs) in Aerospace Applications Using Topology Optimization. *Energy Harvesting and Systems*. 4 (2), PP 87-105. doi.org/10.1515/ehs-2016-0017

Kopcha, T. J., McGregor, J., Shin, S., Qian, Y., Choi, J., Hill, R., **Mativo, J. M.**, Choi, I. (2017). Developing an Integrative STEM Curriculum for Robotics Education Through Educational Design Research. *Journal of Formative Design in Learning*, 1(1), 31-44. [doi:10.1007/s41686-017-0005-1](https://doi.org/10.1007/s41686-017-0005-1)

Mativo, J. M. & Asunda, P. (2017) Integrated STEM: A New Primer for Teaching Technology Education (Part 2), *Technology and Engineering Teacher* February, pp. 14-19

Mativo, J. M., Smith, B., Thompson, E., & Wicklein, R. (2016). A Formative Evaluation of a South East High School Integrative Science, Technology, Engineering, and Mathematics (STEM) Academy., *Elsevier_ Technology in Society* 45(2016) 34-39

Mativo, J. M. & Huang, S. (2015). Learning from Student Projects in Logic Design. *Journal of STEM Teacher Education* Vol. 50, No. 1, Fall 2015. ISSN: 19381603

Asunda, P. & **Mativo, J. M.** (2015). Integrated STEM: A New Primer for Teaching Technology Education. *Technology and Engineering Teacher* Vol. 75, Issue 4, December/January 2016

Mativo, J. M. (2014). Cognitive responsiveness to human factors engineering design. *Journal of Manufacturing and Design Science* 1(3):32-37; DOI: 10.12966/jmnds.12.01.2014

Mativo, J. M., Hill, R. B., & Godfrey, P. W. (2013). “Effects of Human Factors in Engineering and Design for Teaching Mathematics: A Comparison Study of Online and Face-to-Face at a Technical College” *Journal of STEM Education*. Vol 14. Issue 4, pp. 34-42

Journal Articles (Online)

Luthra, A., Lawrence, T., & **Mativo, J.M.** (2020). *Harnessing Drag Energy in Electric Automobiles*. American Society for Engineering Education (ASEE) – Energy Conversion Division. Montreal, Quebec, Canada. June 21–24. Paper ID#31199., pp 1-12

Walters, K., **Mativo, J. M.,** & George, U. (2020). *Women enrolled in engineering programs: Their interest and goals*. ASEE, Montreal, Quebec, Canada. June 21–24. Paper ID#28519., pp 1-14

Pierson, J., **Mativo, J.M.,** Chiuz, E., Trudgen, M., & Herring, C. (2020). *Student participation in Formula SAE design, fabrication, and testing as Capstone Experience*. ASEE – Capstone Division. Montreal, Quebec, Canada. June 21–24. Paper ID#30390., pp 1-14

Sirinterlicki, A., **Mativo, J.M.,** Pham, J.T. (2020). *Using Nintendo Switch Development Environment to Teach Computer Game Programming and Virtual Reality*. ASEE. Montreal, Quebec, Canada. June 21-24. Paper ID# 30164., pp 1-12

Mativo, J. M. & Uduak George. (2019). *Influences of female/women engineering professionals at the workplace, home, and community*. ASEE-Women in Engineering Division. Tampa, FL. June 16 – 19. Paper ID#24875., pp 1-15

Mativo, J. M., Plant, D. & Wallon, D. (2019). *Conversion of a prime mover: One-third scale model-T from gasoline to electric power*. ASEE-Energy Conversion Division. Tampa, FL. June 16–19. Paper ID#26398., pp 1-23

Sirinterlicki, A. & **Mativo, J.M.** (2019). *Critical Thinking in Manufacturing Engineering Education*. ASEE-Engineering Technology Division. Tampa, FL. June 16–19. Paper ID#26737., pp 1-10

Mativo, J. M., Sochacka, N., Youngblood, K., Brouillard, R., and Walther, J. (2017). *Developing real-life problem-based learning (PBL) activities through partnership with industry*. ASEE-Mechanical Engineering Division, Columbus OH. June 25–28. Paper ID#17786., pp 1-13

Mativo, J. M., Hill, R. B., Choi, I., Kopcha, T.J., McGregor, J. (2017). *Lessons learned in teaching science using an integrative approach that used engineering design process*. ASEE – K-12 Division, Columbus OH. June 25–28. Paper ID#20359., pp 1-9

Huang, S. & **Mativo, J. M.** (2016). *Promote students’ understanding of engineering dynamics: A true/false reasoning practice*. ASEE- Mechanical Engineering Division, New Orleans, LA. June 26–29. Paper ID#16053., pp 1-7

Huang, S. & **Mativo, J. M.** (2015). *Impact of reflective learning practices on students’ learning of engineering dynamics*. ASEE – Mechanical Eng. Division, Seattle, WA. June 12–17. Paper ID#12469., pp 1-7

Mativo, J. M. & Huang, S. (2014). *Prediction of students’ academic performance: Adapt a methodology of predictive modeling for a Small Sample Size*. Frontiers In Education (FIE). Institute of Electrical and Electronics Engineers (IEEE); Madrid, Spain. October 22-25. pp 1-3.

Mativo, J. M., & Savadatti, S. (2013). *Challenges in Transforming Brittle to Flexible Structures.* American Society for Engineering Education (ASEE) – Mechanical Engineering Division. Atlanta, GA. June 24–26. Paper ID#6890., pp 1-12

Work Submitted Under Review

Hoang, N., Anguiano, J., **Mativo, J.** & George, U. (2021). Understanding motivations/influences for selecting a major for university students in a US Southeast region. *American Educational Research Journal* [Submitted]

Kisaalita, W. S., **Mativo, J. M.,** & Youngblood, K. M. (2021). What reflective essays tell us about student learning outcomes from inquiry- and/or design-based international engagement projects? *Journal of Community Engagement and Scholarship* [under 2nd review]

Kisaalita, W. S., Muyanja, C.K., **Mativo, J.M.** (2021). Undergraduate Students' Short-Term Inquiry- or Design-Based Overseas Experiences Enhance their Global Engagement Acumen. *European Journal of Engineering Education* [under 2nd review]

Other publications

Choi, I., Hill, R., Kopcha, T., **Mativo, J.,** Bae, Y., Hodge, E., . . . Um, K. (2015). *Danger zone: A STEM-integrated robotics unit – My design journal.* Seoul, Korea: RoboRobo Co., Ltd. ISBN: 979-11-86693-01-8

Choi, I., Hill, R., Kopcha, T., **Mativo, J.,** Bae, Y., Hodge, E., . . . Um, K. (2015). *Danger zone: A STEM-integrated robotics unit – My design journal (teacher's ed.).* Seoul, Korea: RoboRobo Co., Ltd. 91 pages

Other edited or co-edited publications

RAIL (2019). My Design Journal - Swahili Translation -Danger Zone: A STEM-Integrated Robotics Unit: (**John Mativo,** Trans.). Athens, GA: RAIL, University of Georgia (Original work published 2015). ISBN: 978-1-7327929-0-6

3.2 Grants

Under Review

- \$200,000 (2022 – 2023) IUGB Phase II. U.S. Department of State, FP00024544. PI- Watkins, B., Co-PIs Ness, E., Mativo, J., and Branch, R.

3.2a Grants received

- \$94,460 (2021-2023) U. S. Department of Education: Language and Cultural Immersion for K-12 Information and Communication Technology (ICT) for Tanzania (PI- Branch; Co-PI Mativo)
- \$36,500 (2020-2021) UGA College of Engineering + External Donors: FSAE and Endurance development(PI- Mativo; Co-PI Trudgen)
- \$250,000 (2020-2022) US DEPARTMENT OF STATE, SIV10020GR0113. IUGB-UGA Development focused Learning and US-Style Higher Education in West Africa (FP00022158). PI- Watkins, B., Co-PIs Mativo, J., Branch, R.
- \$94,460 (2020 - 22) U.S. Department of Education: Cultural immersion and technology and engineering curriculum (PI- Mativo; Co-PI Branch) #P021A200013
- \$1,500,000 (2020 -24) NSF. Collaborative Research: DTI: ImageSTEM: Middle School Teacher and Student's Experiences with Artificial Intelligence via Computational Cameras. PI- Jayasuriya, S. (Arizona S. U); Pidaparti, R. (Co-PI), Robinson, D., & Mativo, J. NSF# 1949384 & 1949493

- \$35,000 (2019-2020) UGA College of Engineering: FSAE and Endurance development (PI- Mativo; Co-PI Trudgen)
- \$89,760 (2018 - 20) U.S. Department of Education: Cultural immersion and technology and engineering curriculum (PI- Mativo; Co-PI Branch) #P021A180009
- \$40,795 (2018) UGA Graduate School Lab Enhancement (PI – Mativo)
- \$22,000 (2018-19) UGA College of Engineering: FSAE development (PI- Mativo, Co-PI Trudgen)
- \$6,000 [5,000 Faculty of Robotics; 1,000 College of Engineering], (2017) The Georgia Informatics Institutes Remote Education and Collaborative Human-Robot Research Laboratory, Kyle Johnsen (PI), John Mativo (Co-PI), Javad Mohammadpour (Co-PI), Mark Trudgen (Co-PI), and Dominik May (Co-PI).
- \$64,783 (2017) Robot Math: Enhancing Mathematics through Robotics. PI- Kopcha, TJ; CO-PIs Beckmann, S; and Mativo, J.M.
- \$7,995 (2015-16). Internal grant from UGA office of STEM. Exploring methods to immerse students in real life learning in dynamics. Co_PIs: Jo Walther, Nicki Sochacka
- \$ 2,500 (2015). COE Maymester. Research support program grant – PI J. Mativo
- \$ 1,000 (2014). Internal grant from Office of STEM Education to promote learning communities.
- \$140,609 (2014) Robot STEM Education. Roborobo, S. Korea. PI_ Choi, I; Co_PIs: Hill, R., Kopcha, T., Hodge, E., and Mativo, J.
- \$638,254 (2014) DUE-S-STEM Scholar Science, Technology, Engineering, and Math (NSF 12-529). Scholarship for Developing Excellence in Engineering and Physics. PI – Lewis, S. P., Co-PIs: Kotal, C. R; Dennis, B; Foutz, T; Milton, J., and Mativo, J.M.
- \$ 5,000 (2014, Feb.4). COE Maymester Innovations in Instruction Grant – PI J. Mativo
- \$600 (2013). Internal grant from Office of STEM Education to promote learning communities. PI: John Mativo
- \$10,000 (2013). Northrop Grumman Corporation. Test for Engineering Aptitude in Mathematics and Engineering (TEAMS) annual competition. Mativo (PI), Thai (CO-PI), Vandergrift (CO-PI)

3.2b Grants submitted, not funded

- \$94,460 (2019) U.S. Department of Education: Cultural immersion and technology and engineering curriculum (PI- Mativo; Co-PI Branch)
- \$1,228,484 (2018) NSF Engaging Ele. Sch. Stu. Bldg...inspired Engineering (PI- Pidaparti, Co-PI – Mativo)
- \$1,023,500 (2018) NSF Lowering Barriers to Robotics for App. Res. ... Immer. Virtl. Reality. (PI- K. Johnsen, Co-PI Mativo)
- \$19,000,044 (2017). Advanced Functional Fabrics of America (AFFOA) Fabric Discovery Center (FDC) Minko, S. (PI); Co_PIs: Locklin, J., Bhat, G., Mativo, J., Sharma, S.
- \$685,600 (2017). the Bureau of Educational and Cultural Affairs (ECA-ECAPEC-17-015) Chepyator-Thomson, R (PI); Co_PIs: Mativo, J.M. and Dwivedi, P.
- \$112,323 (2017). SBIR Phase II: Engaging Undergraduate Engineering Students in Authentic Inquiry, Johnsen, K. (PI); Co_PIs: Savadatti, S.; Mativo, J.
- \$299,700 (2017) NSF proposal: Girls' Embodiment of STEM Thinking while Using Robots (GESTURE). PI- Kopcha, TJ; co-PI-Matavo, J.
- \$2,000,000. NSF proposal (2015-16) for establishing an Engineering Research Center at UGA. PI- Jason Locklin. Proposal # FP00006608

- \$142,660.00 (2014). To NSF. The Globally-Connected Stem Classroom: Cultivating R2c2 (Respectful, Reflective, Collaborative, And Creative) Student Minds For A Sustainable Future. PI: Ikseon Choi, CO-PIs: T. Kopcha, & John Mativo
- \$ 448,555.00 (2013). To National Science Foundation. The Globally-Connected STEM Classroom: Cultivating R2C2 (Respectful, Reflective, Collaborative, and Creative) Student Minds for a Sustainable Future. PI: Ikseon Choi, CO-PIs: Emily Hodge, John Mativo, Theodore Kopcha

3.3 Recognitions and outstanding achievements

- University level: Josiah Meigs Distinguished Teaching Professor, University of Georgia, Jul 2021
- University level -Member: UGA Teaching Academy, Inducted on November 14, 2019
- International level: SAE Outstanding Faculty Advisors Program, Society of Automotive Engineers Award (2019)
- University level: Richard B. Russell Excellence for Undergraduate Teaching Award – 2017
- College Award: Faculty Senate D. Keith Osborn Award for Teaching Excellence in the College of Education, UGA, 2015 [Associate Level]
- College Award: Faculty Senate D. Keith Osborn Award for Teaching Excellence in the College of Education, UGA, 2012 [Assistant Level]

3.4 Areas in which research is done

As a scholar in workforce education and engineering. Research is especially focused on learning science, technology, engineering, and mathematic (STEM) content, particularly in engineering and technology career pathways. Two related main areas of focus: (1) instruction and curricular development for students in workforce education and engineering, and (2) research engagement in basic engineering. The two strands strengthen each other by providing real life engineering applications to the courses he teaches. This provides students with coursework relevant to the existing workforce.

3.5 Supervision of student research

During his tenure at the University of Georgia, Dr. Mativo has served on 41 doctoral committees, 5 as Major Professor*, that had successful completions. He currently serves on 21 doctoral committees, 9 of which he is chair.

Completed Ed. D or Ph. D Programs – Committee Served On

Name (Major Professor) *	Department	Year Completed	Count
Landers, Rachael	CIS [Learn., Dsg., & Tech (LDT)]	2021	41
Daniel, Jeremy	CIS [Workforce (WE)]	2021	40
Goad, Stephen*	CIS (WE)	2021	39
Ocak, Ceren	CIS (LDT)	2020	38
Yassine, Brianne	CIS (LDT)	2020	37
Woodley, Kylea	CIS (WE)	2020	36
Conley, Lisa D	CIS (WE)	2020	35
Coppet, Tycie	CIS (WE)	2020	34
Grady, Zeketra	CIS (WE)	2020	33
Qian, Yingxiao (Karen)	CIS (LDT)	2019	32
Turman, Jason Kyle	CIS (WE)	2019	31
Todd, Andrew W*	CIS (WE)	2019	30
Choi, Hungyoon	CIS (WE)	2019	29
Pollard, Ashley*	CIS (WE)	2018	28
Parks, Valencia H	CIS (WE)	2018	27
Harbin, Tonia*	CIS (WE)	2018	26

Mercer, Lynn	CIS (WE)	2017	25
Kiprono, Felisters	CIS(WE)	2017	24
Rivers, Cynthia H.	CIS(WE)	2017	23
Dongho, Kim	CIS(LDT)	2017	22
Shin, Seungki	CIS (LDT)	2017	21
Kwame, Nti	CIS(WE)	2016	20
Xing, Xue	CIS(WE)	2016	19
Schmidt, Christine	CIS(WE)	2016	18
Schmidt, Timothy	CIS(WE)	2016	17
Smith, Zach*	CIS(WE)	2015	16
Cook, Michael	CIS (WE)	2015	15
Wen, Jiaxin	CIS(WE)	2015	14
Wilson, Gregory	CIS(LDT)	2015	13
Gurney, James	CIS(WE)-SF	2015	12
Thompson, Ezra	CIS (WE) –TE	2014	11
Koch, Joanna Greer	CIS (WE) – SF	2013	10
Carr, Ashley	CIS (WE) –SF	2013	9
Kang, Byeonggu	CIS (WE)	2012	8
Lui, Yu	CIS (WE)	2012	7
Pontzer, Mary Michael	CIS (WE) –SF	2011	6
Park, Jae Hyun	CIS (WE)	2011	5
Gemici, Sinan	CIS (WE)	2010	4
Washington, Cheryl Denise	CIS (WE) –BE	2010	3
West, David	CIS (WE) –AE	2009	2
Camick, Paul William	CIS (WE) –TE	2009	1

Ed.D. and Ph. D Committee Currently Serving On or chairing as major professor

Count	Name	Program	Expected Completion
21	Wilson, Greg	WE	2022
20	Malone, Kandra	WE	2022
19	Highnote, Connie	WE	2022
18	Rankins, Juliette (Chair)	WE	2021*
17	James, Shuntavia (Chair)	WE	2022
16	Boyle, Tami A. (Chair)	WE	2022
15	Jackson, Angel (Chair)	WE	2021
14	Kelly, Laura (Chair)	WE	2023
13	Lewis, Quinesha (Chair)	WE	2023
12	Schenk, Raymond (Chair)	WE	2021
11	Shan, Samuel Shi Huh (Chair)	WE	2021
10	Wooden, Jennifer L (chair)	WE	2021
9	Bishop, Samantha	WE	2020
8	Hearn, Luke	WE	2020
7	Collins, Sharron La Sha	WE	2022
6	Kesse, Moulare	WE	2023
5	Coes, Alvie	WE	2022
4	Edwards, Jennifer C	WE	2022
3	Joyner, Tracy L	WE	2022
2	Turnispeed, Melissa	WE	2023

1	Williams, Alexis	WE	2023
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3.6 Editorship or editorial board member/ journal reviewer

- Associate Editor - *Journal of Research in Technical Careers* 2016–2018
- Reviewer for *Journal of Research in Technical Careers* from 2016–2019
- Reviewer for the *TeachEngineering* Digital Library, a K-12 engineering resource 2010 to present
- Reviewer for the *Journal of Engineering Technology*, a refereed journal for the Engineering Technology division of the ASEE 2006–2014
- Reviewer: *Journal of Pre-College Engineering Education*, a refereed Journal 2010–2014
- Reviewer for *American Society for Engineering Education*, Mechanical Engineering Division, Engineering Technology division, and K-12 Division. 2007–present
- ITEEA CTTEE reviewer 2012–present

3.8 Conference papers – during associate professor period

Walters, K., Choi, I., Ocak, C., **Mativo, J.**, Kwon, S., Truong, E. (2019, October). *A case study for Train-the-Trainer and teacher-empowerment in Honduras: 6th grade STEM-integrated robotics curriculum implementation*. Poster presented at the annual conference of the Association for Educational Communications and Technology, Las Vegas, NV.

Kopcha, T., & **Mativo, J.** (2018, October 1). Integrating Robots into Elementary Mathematics. In *Georgia STEM Forum State Conference*. Athens, GA

Mativo, J. M. & Smith, B. (2016, April 8–12). *Evaluation of an integrated STEM (Science, Technology, Engineering, Math) Program: The students' perspective*. American Educational Research Association (AERA). Washington DC.

Choi, I., Kopcha, T., **Mativo, J.**, Hill, R., Hodge, E., Shin, S., Way, B., McGregor, J., Kim, S., Choi, J. & Bae, Y. (2016). Learning Computer Programming in Context: Developing STEM-integrated Robotics Lesson Module for 5th Grade. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 68-74). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/p/171653/>

Mativo, J.M., & Hallinan, K. (2016, September 6). Modeling thermoelectric topology optimization for use in vibratory environments. Energy Harvesting Workshop. Arlington, VA.

Mativo, J. M., Walther, J., & Sochacka, N. (2016, February 26). Experiential learning: Developing real-life problem-based learning activities through partnership with industry- Engineering Dynamics. Presented at the Fifth Annual UGA STEM Institute on Teaching and Learning: Increasing the pool of STEM Talent.

Seungki, S., Kopcha, T.J., Choi, I., **Mativo, J.**, Hill, R., Qian, K., & McGregor, J. (2016, April 1). Childrens' computational thinking during a robotics activity. Poster presentation at UGA COE Research Conference.

Mativo, J. M. (2015, April 8–10). Panelist (Invited): *Matching individual and organizational needs*. UZURI Conference: Strength in Numbers, Pittsburgh PA.

Mativo, J. M. & Huang, S. (2014, October 17). *Prediction of students' academic performance: Adapt a methodology of predictive modeling for a Small Sample Size*. College of Education innovation in Teaching Conference, UGA. Athens, GA.

Mativo, J.M., & Camick, P. (2014, October 17). *Test of engineering aptitude in mathematics and science*. GA Engineering and Technology Education Association. Savannah GA.

Mativo, J.M., & Thompson, E. (2014, March 26–29). *Lessons Learned from ongoing Integrated STEM cases*. International Technology and Engineering Education Association (ITEEA), Orlando, FL.

Mativo, J. M. (2013, October 28–November 2). *Contemporary engineering education trends in the United States of America*. 3rd Global Engineering Education Forum. Seoul, Korea.

Mativo, J. M. (2013, November 1). *Workshop seminar on appropriate technology*. Yonsei University (Mechanical and Materials Engineering). Seoul, Korea.

Mativo, J. M. (2013, March 6–8). *Investigating optimization*. International Technology and Engineering Education Association (ITEEA), Columbus, OH.

Scott, G., **Mativo, J. M.,** & Lammi, M. (2013, March 6–8). *But I don't have a degree in engineering!* International Technology and Engineering Education Association (ITEEA), Columbus, OH.

4. PUBLIC SERVICE

- Keynote Speaker at ChargeNorth STEM, North Gwinnett High School March 2020
- Coordinator, Test for Engineering Aptitude in Mathematics and Science, 2009–2019
- Judge, UGA Global Education Forum, Annually - March, 2014–March 2019
- Judge, 2018 Georgia Technology Student Association National Conference, Atlanta, GA
- Judge, 2nd Annual RAIL Robotics Competition, May 17, 2016, SIMS academy of Innovation and Technology, Barrow County
- Volunteer, FIRST Robotics Competition, UGA, April 13–16, 2016
- Volunteer, FIRST Lego League, State Competition, UGA, Feb. 2013 - Feb 5, 2016
- Reviewed (2015) several articles for ASEE, FIE, and ITEEA
- Appointed National Science Foundation Primary Panelist for Advancing Informal STEM Learning (AISL), March 20–21, 2014
- Judge, Technology Student Association, Electrical Applications, March 14. '14; March 2015
- 2013 Invited Panelist, Dekalb County STEM initiative (October, 23)
- 2013 Science Venture Program. Presenter at Cedar Shoals High School – Invited (March, 5)

5. OTHER SERVICE

- Member QEP (Quality Enhancement Plan) Development and Implementation Committee, UGA. October 2020 - present
- Reviewer, UGA Office of Research. Faculty Seed Grants in the Sciences FY21- 2020
- Member, T² Summit: A Technology and Talent Automotive/Motorsports Summit, UGA College of Engineering & Industry initiative 2019-present
- Member, Science Education search committee 2019 –2020
- Advisory Board Member, Georgia Educators in Mathematics and Science, UGA 2018–2019
- Member, UGA PRAC reviewer for African Studies Institute in the College of Arts and Sciences 2016–2018
- Member, CIS - Workforce Education search committee 2018–2019

- Member, CIS - Learning, Design, and Technology search committee 2017–2018
- Member, RAIL outreach program to San Pedro Sula, Honduras – May 2018
- Member, College of Education Senate 2017 –present
- Invited... Panelist for UGA STEM initiative – experiential learning, Feb 26, 2016
- CIS, Research and Scholarship Committee, Member
- CIS, Awards Committee: Member 2014–2016
- Torrance Chair, Search Committee Member 2015–2016
- Founding Advisor (2014-present), Society of Automotive Engineers, C. of Engineering, UGA
- Co-Advisor (2014–2016, American Society of Mechanical Engineers, C. of Engineering
- Elected Member, 2014–2017 – UGA University Council Standing Committee on Facilities
- Co-Chair UGA University Council Standing Committee on Facilities 2016–2017
- Reviewed 9 articles for summer 2014 Innovation Instruction Summer Grants: Office of the Vice President for Instruction UGA, March 28, 2014
- Reviewed 2 articles for Faculty of Robotics UGA- Grants, 2014
- COE Promotion & Tenure committee, 2014
- Appointed CIS Peer Evaluation Committee served Feb 13 to 17, 2014.
- 2013 Secured UGA Takshila (India) Partnership with Dr. Branch and Rajesh Kumar
- Elected Member, 2013–2016 – UGA University Council Standing Committee on Intercollegiate Athletics
- Elected Member, 2012–2015 – UGA University Council
- Member, 2012–2014 – COE Student Appeals Committee
- Recruit at UGA Griffin-Bionic Educator Conference, April, 26, 2013