

KAUSHIK LUTHRA

OBJECTIVE

To hone my skills in engineering and research and be a leader involved in managing resources through my technical background.

EDUCATION

- January, 2018 - Present** **Ph. D. in Engineering**, Dept. of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR
Grade point average: 4.0/4.0
- August, 2015 - August 2017** **Master of Science in Biological Engineering**, Dept. of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR
Grade point average: 4.0/4.0
- July 2011 - July 2015** **Bachelor of Technology in Agricultural Engineering**,
College of Technology, G. B. Pant University of Agriculture & Technology, Pantnagar, India
Grade point average: 7.98/10

PROJECTS AND TRAINING

- Senior Graduate Research Assistant at University of Arkansas, Fayetteville, AR**
January 2018 – Present
- Working on developing a small scale fluidized-bed dryer for drying rice
 - Awarded the Doctoral Academy Fellowship for studying at the University of Arkansas, Fayetteville.
 - Author of a paper entitled “Exploration of Rough Rice Quality Subjected to Drying and Hold-Up Durations in a Fluidized Bed System” submitted for publication in the Journal of Applied Engineering in Agriculture (Manuscript No. PRS-12925-2018).
 - Co-Author of a paper entitled “Evaluation of the Performance of a Custom-Made Fluidized Bed Drying System” under review for publication in the Journal of Applied Engineering in Agriculture (Manuscript No. PRS-12909-2018).
- Technical Assistant-1, Dept. of Bio & Ag Eng., University of Arkansas, Fayetteville, AR**
July 2017 – December 2017
- Helped with data collection and sampling in projects related to poultry transportation and post-harvest grain drying & storage.
 - Analyzed thermal data collected in the poultry transportation project using SAS, MS Excel and JMP.
 - Lab management and execution of the daily instructions by the supervisor.
- Graduate Research Assistant at University of Arkansas, Fayetteville, AR**
August 2015 – June 2017
- Author of a paper entitled “Construction and performance of a self-contained, temperature-controlled heat source (electronic chicken) to quantify thermal load during live haul of broilers” accepted for publication in the Journal of Applied Engineering in Agriculture (Manuscript No. PAFS-12654-2017).
 - Lead the field trips to get thermal data of the micro-environment developed during transit in broiler transportation trailers for all seasons.
 - Developed electronic chickens as a tool to measure heat loss of broilers during transportation which is used as an indication of thermal heat stress.
 - Calculated apparent equivalent temperature (AET) and humidity ratio to understand the moisture load on the trailers during transportation of broilers.
 - Performed correlation analysis between AET and core body temperature change of broilers during transport.
 - Performed the sensitivity analysis of all the temperature and temperature/humidity data loggers in the laboratory beforehand to get the accurate field data.
 - Co-author of a paper entitled “Impact of Climate Variations on Soybean Yield in Eastern Arkansas: 1960-2014” which has been published in volume 70 (2016) of the *Journal of the Arkansas Academy of Science* (JAAS).
 - Presented a poster entitled ‘Correlation analysis of core body temperature of broilers and heat index during transport in Southern United States’ at International poultry scientific forum annual conference in Atlanta, GA.
 - Judged junior category and special category awards in Northwest Arkansas regional science &

educational fair (NWARSEF, 2017) held at the University of Arkansas, Fayetteville.

- Lifetime member of the Tau Beta Pi, the engineering honor society.
- Passed the Fundamentals of Engineering (FE) Exam for the licensure of Engineer-in-Trainee (EIT) through the Arkansas board (<https://account.ncees.org/rn/1760007-1001920-679a8a1>).

Undergraduate Research Assistant at GB Pant University, Pantnagar, India.
August 2011 – June 2015

- Worked as a senior and developed erosivity model on daily rainfall analysis for Dehradun, India.
- Performed soil sampling and testing from agricultural fields in Pantnagar, India.
- Awarded Best poster paper at the 48th annual conference of Indian Society of Agricultural Engineers.
- Secured Third position in an inter-university English debate competition held at Jamia University, New Delhi, India
- Awarded a B-Certificate for the National Service Scheme (NSS) in India by the Department of Youth Affairs and Sports, Govt. of India

Summer Intern at Indian Farmers Fertilizer Cooperative Limited, Allahabad, India
June 2014 – July 2014

- Familiarized with the fertilizer plant and machinery for production and packaging.
- Co-facilitated the quality check processes.

AREAS OF INTEREST

Post-harvest grain drying and storage, food production & management, engineering and research, data analysis and presentation, statistics, simulation modeling, modern sensors & control.

SKILLS

Spoken Language	Hindi and English (Highly Proficient)
Software & Programming Language	MS Office (Word, Excel, Power point), JMP, SAS, Python & VBA-MS Excel.

SIGNIFICANT ACTIVITIES, ACHIEVEMENTS & PUBLICATIONS

- July, 2018 – August, 2018
 - Serving as a Graduate Student Ambassador in the 2018 Fulbright Pre-Academic Program.
- July, 2018
 - Author of a paper entitled “Construction and performance of a self-contained, temperature-controlled heat source (electronic chicken) to quantify thermal load during live haul of broilers” accepted for publication in the Journal of Applied Engineering in Agriculture (Manuscript No. PAFS-12654-2017).
- June, 2018
 - Completed an online certification entitled “Introductory to data analysis using Excel” authorized by Rice University and offered through Coursera, an online learning platform.
- May, 2018
 - Author of a paper entitled “Exploration of Rough Rice Quality Subjected to Drying and Hold-Up Durations in a Fluidized Bed System” submitted for publication in the Journal of Applied Engineering in Agriculture (Manuscript No. PRS-12925-2018).
 - Co-Author of a paper entitled “Evaluation of the Performance of a Custom-Made Fluidized Bed Drying System” under review for publication in the Journal of Applied Engineering in Agriculture (Manuscript No. PRS-12909-2018).
 - Presented a poster entitled “Calibration of wireless moisture content probes for varying levels of rice dockage and moisture content” in 2018 Industry Alliance Meeting, Fayetteville, AR.
- April, 2018
 - Presented a poster entitled “Maintaining Quality of Rough Rice Dried in a Fluidized Bed by adding Hold-up periods” Arkansas Academy of Science, 102nd Annual Meeting, Jonesboro, AR.
 - Awarded Academic Prowess Award-2018 by Graduate Professional Student Congress, University of Arkansas, Fayetteville, AR.
 - Participated in a poster competition hosted by Graduate Professional Student Congress, University of Arkansas, Fayetteville, AR.
 - Presented a poster entitled “Correlation analysis of core body temperature of broilers and heat index during transport in Southern United States.” at the annual meeting of Arkansas Academy of Science in Jonesboro, AR.
- March, 2018
 - Participated in 3MT competition-Graduate student oral thesis presentation competition.
 - Judged junior category and special category awards in Northwest Arkansas regional science & educational fair (NWARSEF, 2018) held at the University of Arkansas, Fayetteville.
- January, 2018 -
 - Awarded Senior Graduate Research Assistantship, Biological & Agricultural Engineering, University of

- Present Arkansas, Fayetteville, AR-72701.
- Awarded Doctoral Academy Fellowship for pursuing Doctorate in Engineering, University of Arkansas, Fayetteville, AR-72701.
- November, 2017
- Awarded the Engineer-in-Trainee (EIT) License by Arkansas State Board of Licensure having the License number: 8807.
- April, 2017
- Runner up of English Language & Cultural Studies Speech Contest, 2017 Fullbright Language Festival, University of Arkansas, Fayetteville, AR.
 - Participated in the Team Chartering Module “Defining the Role of Teams and Developing the Team’s Own Charter” hosted by Tau Beta Pi Engineering Futures Program, University of Arkansas, Fayetteville, AR.
- March, 2017
- Judged junior category and special category awards in Northwest Arkansas regional science & educational fair (NWARSEF, 2017) held at the University of Arkansas, Fayetteville.
- January 2017
- Presented a poster entitled “Correlation analysis of core body temperature of broilers and heat index during transport in Southern United States.” at the annual conference of International Poultry Scientific Forum (IPSF) in Atlanta, GA.
- December 2016
- Co-author of a paper entitled “Impact of Climate Variations on Soybean Yield in Eastern Arkansas: 1960-2014” published in volume 70 (2016) of the Journal of the Arkansas Academy of Science (JAAS).
- November 2016
- Completed an online certification entitled “Business metrics for data driven companies” authorized by Duke University and offered through Coursera, an online learning platform.
- December 2015
- Completed an online certification entitled “Programming for Everybody (Getting Started with Python)” authorized by University of Michigan and offered through Coursera, an online learning platform.
- August 2015- June 2017
- Awarded Graduate Research Assistantship, Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR-72701.
- March 2015
- Presented a poster entitled “Soil Remediation using Nanotechnology for the betterment of the farmers in India-An overview” in World Congress on Green Nanotechnology and its role in Sustainable Agriculture held at Sam Higginbottom Institute of Agriculture, Technology & Sciences, Allahabad, India.
- February 2015
- Awarded a B-Certificate for the National Service Scheme (NSS) in India by the Department of Youth Affairs and Sports, Govt. of India for my voluntary services to the nearby community during my junior year in college.
- October 2014
- Presented a poster entitled “A method for soil conservation and improving soil quality” in National Symposium on “ECM” Technology for safe, secure and profitable food production held at Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, India.
- March 2014
- Presented an oral presentation on a conference paper entitled “ Innovative method of treating soil with waste water for control of dust and establishing soil stabilization” in International Conference at Jawaharlal Nehru University, New Delhi, India.
 - The author of a conference paper entitled “ Innovative method of treating the soil with waste water for control of dust and establishing soil stabilization” which was published as a chapter in a book titled “Agriculture: Towards a new Paradigm of Sustainability” (ISBN: 978-93-83083-64-0), New Delhi, India.
- February 2014
- Awarded Best Poster Paper Award for a poster presentation entitled “Reducing effects of temperature rise on the production of fruits and vegetables in India using Green Technology” in 48th Annual Convention of Indian Society of Agricultural Engineers (ISAE) at Maharana Pratap University of Agriculture and Technology, Udaipur, India.
 - Presented and was co-authored of a conference paper entitled “Attaining food security by reducing postharvest losses of grains using Conservation Grain Cooling Technology” presented in 48th Annual Convention of Indian Society of Agricultural Engineers (ISAE) at Maharana Pratap University of Agriculture and Technology, Udaipur, India.
- November 2013
- Presented a poster presentation on a research paper entitled “Innovative method for soil conservation and erosion control on hills” in National Seminar on “Innovations in Traditional Agriculture” held at Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, India.
- June 2013
- Presented a conference paper entitled “Role of Precision Farming in Sustainable Development of Hill

Agriculture” in National Seminar on “Technological Interventions for Sustainable Hill Development” held at Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, India.

March 2012

- Participated in a National level Technical Festival “Colosseum” hosted by College of Technology, Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, India.
- Represented Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, India and Secured Third Position in National Inter-University English Debate Competition held at Jamia Milia Islamia University, New Delhi, India.
- Awarded an appreciation certificate for representing Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, India at national level literary activities.

January 2012

- Participated in International Youth Conference-2012 on “Youth for Integral Humanism” held at Govind Ballabh Pant University of Agriculture & Technology, Pantnagar, India.

July 2011

- Awarded Merit Scholarship by Indian Council of Agriculture Research (ICAR), New Delhi during the period for undergraduate studies.

PROFESSIONAL MEMBERSHIPS

- Graduate student member of American Society of Agricultural & Biological Engineers (# 1054383), comprises student membership of Canadian Society for Bioengineering and International Commission of Agricultural Engineering.
- Graduate student member of Association of Agricultural, Biological, and Food Engineers of Indian Origin-membership community under American Society of Agricultural & Biological Engineers.
- Lifetime member of Indian Society of Hill Agriculture-L/57/14
- Lifetime alumni member of the Tau Beta Pi, the engineering honor society (Membership ID 584634).
- Graduate student member of Arkansas Academy of Sciences.

REFERENCES

- Dr. Sammy Sadaka (ssadaka@uaex.edu)
Associate Professor, Extension, Department of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR-72701
- Dr. Griffiths Atungulu (atungulu@uark.edu)
Assistant Professor, Department of Food Science, University of Arkansas, Fayetteville, AR-72701
- Dr. Yi Liang (yliang@uark.edu)
Associate Professor, Extension, Department of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR-72701
- Dr. Thomas Costello (tac@uark.edu)
Associate Professor, Department of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR-72701
- Dr. Lalit Verma (lverma@uark.edu)
Professor & Department Head, Department of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR-72701
- Dr. Susan Watkins (swatkin@uark.edu)
Professor/Extension specialist, Center of Excellence for Poultry Science , University of Arkansas, Fayetteville, AR-72701
- Dr. Otto Loewer (ojl@uark.edu)
Professor, Department of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR-72701
- Dr. Edward Gbur (egbur@uark.edu)
Professor, Department of Agricultural Statistics, University of Arkansas, Fayetteville, AR- 72701
- Dr. Pravendra Kumar (pravendrak_05@yahoo.co.in)
Professor, Department of Soil & Water Conservation Engineering, G. B. Pant Univ. of Agriculture & Technology Pantnagar-263145, India