

John P. Fulton

Professor

Food, Agricultural and Biological Engineering, The Ohio State University

590 Woody Hayes Drive · Columbus, OH 43210

334.740.1329 · Fax 614.292.9448 · fulton.20@osu.edu

EDUCATION

Ph.D.	Biosystems and Agricultural Engineering	University of Kentucky	2003
M.S.	Agricultural Engineering	University of Kentucky	1999
B.A.	Physics	Wittenberg University	1994

PROFESSIONAL EXPERIENCE

2020 to present	Professor , Food, Agriculture & Biological Engineering Department, The Ohio State University
2014 to present	Food, Agriculture and Biological Engineering Professorship , Food, Agriculture & Biological Engineering Department, The Ohio State University
2014 to 2020	Associate Professor , Food, Agriculture & Biological Engineering Department, The Ohio State University
2012 to 2014	Agronomics Crops Team Leader , Alabama Cooperative Extension System
2009 to 2014	Associate Professor and Extension Specialist , Biosystems Engineering Department, Auburn University
2004 to 2009	Assistant Professor , Biosystems Engineering Department, Auburn University
1999 to 2003	Engineer Associate , Biosystems and Agricultural Engineering Department, University of Kentucky
1996 to 1999	Agricultural Engineer , Biosystems and Agricultural Engineering Department, University of Kentucky
1994 to 1996	Graduate Research Assistant , Biosystems and Agricultural Engineering Department, University of Kentucky

ACADEMIC APPOINTMENT

9-Month Appointment with 25% Teaching, 10% Research and 65% Extension Budgeted Effort.
Professional specialty: machinery automation, nutrient application technology, and digital agriculture.

RECENT PUBLICATIONS

Book Chapters

- Fulton, J.P. and M. Darr. 2018. GPS, GIS, Guidance, and Variable-rate Technologies for Conservation Management. In *Precision Conservation: Geospatial Techniques for Agricultural and Natural Resources Conservation* (pp. 65-81). Published by: ASA, CSSA & SSSA, Madison, WI.
- Fulton, J.P. 2018. Chapter 12: Variable seeding systems for precision agriculture. In *Precision Agriculture for Sustainability* (Ed. Dr John Stafford). Burleigh Dodds Science Publishing, Cambridge, UK.

- Fulton, J.P. and K. Port. 2018. Chapter 12: Precision Ag Data Management. In Precision Agriculture Basics, editors D.K. Shannon, D.E. Clay, N.R. Kitchen. ASA, CSSA, and SSSA, Madison, WI.
- Fulton, J.P. E. Hawkins, R. Taylor, and A. Franzen. 2018. Chapter 5: Yield Monitoring and Mapping. In Precision Agriculture Basics, editors D.K. Shannon, D.E. Clay, N.R. Kitchen. ASA, CSSA, and SSSA, Madison, WI.

Refereed

- Matcham, E.G., W.P. Hamman, E. Hawkins, J.P. Fulton, S. Subburayalu, and L.E. Lindsey. 2020. Soil and Terrain Properties that Predict Differences in Local Ideal Seeding Rate for Soybean. *Agronomy J.* 2020: 1-11.
- Virk, S., W. Porter, J.P. Fulton, and G.L. Pate. 2019. Field Validation of Seed Meter Performance at Varying Seeding Rates and Ground Speeds. *Applied Engineering in Agriculture.* 35(6): 937-948.
- Zoller, C., Hawkins, E., Custer, S., Fulton, J., and Richer, E. 2019. Developing a Successful On-Farm Research Program. *J. NACAA.* 12(2): 1-4.
- Virk, S., J.P. Fulton, W. Porter, and G.L. Pate. 2019. Row-Crop Planter Performance to Support Variable-Rate Seeding of Maize. *Precision Agriculture.* (2019): 1-17.
- Poncet, A. J.P. Fulton, T.P. McDonald, T. Knappenberger, and J.N. Shaw. 2019. Corn Emergence and Yield Response to Row-Unit Depth and Downforce for Varying Field Conditions. *Applied Engineering in Agriculture.* 35(3): 399-408.
- Ward, A., A. Sharpley, K. Miller, W. Dick, J. Hoorman, J.P. Fulton, and G.A. LaBarge 2018. An assessment of nutrient best management practices for agricultural crop systems with subsurface drainage: Part 1, In-field BMPs. *J. Soil and Water Conservation.* JAN/FEB 2018, 73(1):5-10.
- Poncet, A.M., Fulton J.P., McDonald T.P., Knappenberger T., Shaw J.N., Bridges R. 2018. Effect of heterogeneous field conditions on corn seeding depth accuracy and uniformity. *Applied Engineering in Agriculture.* 34(5):819-830.
- Khanal, S., J.P. Fulton, N. Douridas, A. Klopfenstein, and S.A. Shearer. 2018. Integrating aerial images for in-season nitrogen management in a cornfield. *Comp. & Elec. Agr.:* 148(2018): 121-131.

ADDITIONAL PROFESSIONAL INFORMATION

Extension / Outreach (since 2014)

- Published 21 extension Fact Sheets and 3 bulletins.
- Delivered 104 presentations including 48 invited talks internationally.
- Participated in 8 online national webinars as the keynote or co-keynote speaker.
- Co-leader of the Ohio State Digital Ag program which has developed a national and international reputation for providing timely and scientific based information on digital ag.
 - Lead the OSU Digital Ag Social Media effort: Facebook (Ohio State Precision Ag; 1,540 Followers); Instagram (@OhioStatePA); Twitter (@OhioStatePA; 2,692 Followers).
 - Lead OSU Digital Ag website development and maintenance: <https://digitalag.osu.edu/>
 - Co-Lead the eFields on-farm research program: <https://digitalag.osu.edu/efields>

Grantsmanship (since 2014): Total Funding: \$1,043,973; PI = \$736,121; Co-PI = \$307,825

Instruction: annually teach ASM 4580: Introduction to Precision Agriculture.

Professional Society Membership: ASABE and ISPA

Recent Awards – 2019 ASABE Standards Development Award; 2013 PrecisionAg Awards of Excellence: Educator/Researcher of the Year.

Regular attendee and presenter at the ASABE AIM, ICPA and InfoAg conferences. Currently, working on a new ASABE Standard focused on evaluating granular fertilizer application equipment.