CAST Issue Paper 70

Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges
Released November 16, 2020

Chair: Santosh Pitla, University of Nebraska-Lincoln;
21-member task force

Release/Rollout
The CAST Issue Paper, “Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges,” was released on November 16, 2020 On November 17. Task force chair, Dr. Santosh Pitla presented highlights of the paper followed by a Q&A session with a panel of five authors—Dennis Buckmaster, Tami Brown-Brandl, Todd Janzen, Michael Sama, and Scott Shearer. There were 604 registrants for the webinar and 319 unique viewers attending on Zoom.
- Webinar Video—316 views as of November 18, 2021
- Link to commentary, Ag quickCAST, student study guide, webinar video, and Q&A.

In-kind Contributions: 270 volunteer hours; $19,980 monetary value

Press Release (results two weeks after release)
- Distributed through Constant Contact, PRWeb, and the CAST website.
- Press release went to 10,169 e-contacts resulting in 4,723 opens
- 105 views of the press release from the CAST website as of May 16, 2021.
- The press release through PRWeb resulted in 3,058 views and reached 975 targeted influencers (journalists/bloggers).

Follow-On Activities
American Society of Agronomy/Soil Science Society of America, 1 CEU for professional development was offered to certified crop advisors for watching the webinar.

This report last updated November 18, 2021.
National Association of Agricultural Educators, Communities of Practice – blog posts in “online/distance learning resources” including a summary of the publication, Ag quickCAST, and student study guide attachment (82 views)

Paper Distribution
Paper Distribution (print and online access from CAST website) 6 months after release –2396

Indirect Paper Distribution
AgriTech Tomorrow, White Papers
https://www.agritechtomorrow.com/whitepapers.php

Ministry of Science and Technology (Taiwan)
https://outlook.stpi.narl.org.tw

University of Nebraska-Lincoln, DigitalCommons@University of Nebraska
https://digitalcommons.unl.edu/biosysengfacpub/727/
https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1732&context=biosysengfacpub

ResearchGate,
https://www.researchgate.net/publication/346023818_Ground_and_Aerial_Robots_for_Agricultural_Production_Opportunities_and_Challenges

Articles and Web Mentions

AgriNews, Machines of the future: Robots give farmers a helping hand, Martha Blum, December 18, 2020

https://www.farmweeknow.com/eedition/page-a11/page_cc99931d-5bda-5a82-b97e-3651647903a0.html
https://www.farmweeknow.com/profitability/can-robots-solve-agricultural-workforce-availability-issues/article_3bb62b2e-29d0-11eb-940d-23c0f7817d49.html

GrainNet, Robots in Agriculture: Council for Agricultural Science and Technology Outlines Opportunities, Challenges, November 20, 2020


This report last updated November 18, 2021.
National Grain and Feed, Robots in agriculture: CAST outlines opportunities and challenges, Sarah Gonzalez, November 20, 2020 Newsletter

Purdue University, ABE News, December 2020
https://engineering.purdue.edu/ABE/aboutus/Newsletter/December2020ABeNotes

Texas Farm Bureau, Texas Agriculture Daily, Challenges, opportunities to adopting robots in ag, Jennifer Dorsett, December 9, 2020 (with link to paper)
https://texasfarmbureau.org/challenges-opportunities-to-adopting-robots-in-agriculture/


Citations


Social Media

Twitter—
@JanzenLaw, November 16, 2020
https://twitter.com/JanzenLaw/status/1328408607310958593
1 retweet, 3 likes

@AgriTechTmrw, November 16, 2020
https://twitter.com/AgriTechTmrw/status/1328383140524666881
1 like

@GregDahl8, November 17, 2020
https://twitter.com/GregDahl8/status/1328782589608529922
1 retweet, 3 likes

@FutureOfAg, November 17, 2020
https://twitter.com/FutureOfAg/status/1328623734467465216

@MichaelKirkby, November 17, 2020
https://twitter.com/MichaelKirkby/status/1328807910558867458

This report last updated November 18, 2021.
@CASTagScience, November 19, 2020
https://twitter.com/CASTagScience/status/1329436811584827393
3 retweets, 3 likes

@UNL_IANR, December 8, 2020
https://twitter.com/UNL_IANR/status/1336325374423126016
1 retweet, 4 likes

@Syed_Meesam_Ali, December 9, 2020
https://twitter.com/Syed_Meesam_Ali/status/1336868098020937734

@CASTagScience, January 27, 2021
https://twitter.com/CASTagScience/status/1354497026071928836
2 retweets, 4 likes

@CASTagScience, April 8, 2021
https://twitter.com/CASTagScience/status/1380194594982408200
3 retweets, 4 likes

Facebook—
CAST, November 4, 2020
3 likes, 1 share

CAST, November 12, 2020

CAST, November 16, 2020
2 likes, 6 shares

CAST, November 17, 2020
https://www.facebook.com/CASTagScience/photos/a.477568575671277/3549530668475037
1 share

CAST, November 19, 2020
https://www.facebook.com/CASTagScience/photos/a.477568575671277/3555119647916139
2 likes

CAST, December 15, 2020
https://www.facebook.com/CASTagScience/posts/3624170384344398
2 likes, 1 share

CAST, January 27, 2021
https://www.facebook.com/CASTagScience/posts/3735004869927615
1 like

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