Brianna B. Posadas, Ph.D.

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08/2020
05/2016
05/2013
08/2024-present
01/2022-04/2024
05/2021-08/2022
09/2020-12/2021 05/2020-08/2020
06/2018-08/2018
05/2017-07/2017
08/2016-05/2020
08/2014-08/2020
08/2014-05/2016
06/2013-04/2014

RESEARCH EXPERTISE

EDUCATION

Human-Computer Interaction, Precision Agriculture, User-Centered Design, Technology Policy

ACHIEVEMENTS IN INSTRUCTION

Program/Curriculum Developed

• Data Science for the Public Good Summer Scholars Program, Department of Agricultural and Applied Economics, Virginia Tech, summer research experience for undergraduates, Summer 2021, 2022

- ALS 5814: Smart Farms: Topics in Agricultural Leadership & Community Education, Department of Agricultural Leadership and Community Education, Virginia Tech, graduate seminar course, Spring 2022
- ALS 5334: Professional Communication in Ag & Life Sciences, Department of Agricultural Leadership and Community Education, Virginia Tech, graduate course, Spring 2021

Instructor

- CS2410 Fundamentals of Data Science, Department of Computer Science, Cal Poly Pomona, Fall 2024
- CS1400 Introduction to Programming and Problem Solving, Cal Poly Pomona, Fall 2024
- ESOL level 2B, Washington English Center, Washington D.C., adult education, Spring 2020
- CodeIT Day, Department of Computer and Information Science and Engineering, University of Florida, middle school outreach, October 2015
- Engineering, Johns Hopkins University's Center for Talented Youth, University of California, Santa Cruz, Summer 2011

Teaching Assistant

ABE 4043C: Senior Design, Department of Agricultural and Biological Engineering, University of Florida, graduate teaching assistant, Fall 2015

Guest Lectures

- ALCE 5814: Inclusive Research Methods in Social Science, *Human-Centered Computing & Technology Policy*, Fall 2021
- SOC 4454: Politics of Big Data, Applications and Policy of Big Data in Agriculture, Spring 2022

<u>Trainings</u>

- Principles of Effective Teaching Certificate from VT's Center for Excellence in Teaching and Learning, 2022
- Inclusive Syllabus Design Training, hosted by Geosciences HHMI Inclusive Excellence Faculty Scholars, 12/2020

ADVISED STUDENTS

*underrepresented student as defined by <u>Emory University</u> + student who identifies as female

Current Committee Member for PhD Dissertation

David Smilnak, Department of Agricultural Leadership and Community Education, VT Tentative Graduation Date: Fall 2024 Advisor: Kim Niewolny

Past PhD Students Advised as Major Professor

*+Sheetal Kumari, School of Plant and Environmental Sciences, VT Tentative Graduation Date: Spring 2027

*Jitender Rathore, School of Plant and Environmental Sciences, VT Tentative Graduation Date: Spring 2027

Past PhD Students Co-Advised as Major Professor

*+Shreya Mitra, Department of Agricultural Leadership and Community Education, VT Tentative Graduation Date: Spring 2026 Co-Advisor: Tom Archibald

Past Committee Member for PhD Dissertation

*Roberto Franco, Department of Agricultural Leadership and Community Education, VT Tentative Graduation Date: Spring 2024 Advisor: Kim Niewolny *+Anuradha Sen, Department of Agricultural Leadership and Community Education, VT Tentative Graduation Date: Spring 2024 Advisor: Tom Archibald

Past MS Students Advised as Major Professor

*Shikhar Poudel, School of Plant and Environmental Sciences, VT Graduation Date: Spring 2024 **Recognitions:** Translational Plant Sciences Center Graduate Fellow

Past PhD Students Supervised as Lab Director

*+Esha Dwibedi, Economics, VT, 2021
*+Fatemeh Esmaeilbeiki, School of Plant and Environmental Sciences, VT, 2023
*Leonard-Allen Quaye, Agricultural and Applied Economics, VT, 2022
*+Poonam Tajanpure, Biological Systems Engineering, VT, 2022

Past MS Students Supervised as Lab Director

*Mehul Bhanushali, Department of Computer Science, VT, 2022-2023
*Pei Cheng Huang, Department of Computer Science, VT, 2022
*Kuo-Hao Lai, Department of Computer Science, VT, 2022
*Ashwin Rachha, Department of Computer Science, VT, 2022
*Avi Seth, Department of Computer Science, VT, 2021

Graduate Student Awards

*+Shreya Mitra & *Mehul Bhanushali (2023). Virginia Tech's CAIA Big Event, 3rd Place in Graduate Student Poster Competition.

*Jitender Rathore and *+Sheetal Kumari (2023). AgAID Agathon competition. Washington State University. Third Place.

Past Undergraduate Students Supervised as Lab Director

*+Catherine Beck, Data Science, University of California, San Diego 2022 Data Science for the Public Good Summer Scholars Program

*+Ruoyu Fan, Applied Mathematics-Economics, Brown University 2022 Data Science for the Public Good Summer Scholars Program

Ryan Jacobs, Environmental Economics, Management, and Policy, Virginia Tech 2021 Data Science for the Public Good Summer Scholars Program

*Ari Liverpool, Applied Economic Management, Virginia Tech 2022 Data Science for the Public Good Summer Scholars Program

*Victor Mukora, Computational Modeling and Data Analytics, Virginia Tech 2021 Data Science for the Public Good Summer Scholars Program

*Josue Navarrete, General Studies, MiraCosta College 2022 Data Science for the Public Good Summer Scholars Program

+Julie Rebstock, Economics and Computational Modeling and Data Analytics, Virginia Tech 2021 Data Science for the Public Good Summer Scholars Program

Atticus Rex, Mechanical Engineering & Computational Modeling and Data Analytics, Virginia Tech 2021 Data Science for the Public Good Summer Scholars Program

*John Wright, Statistical and Data Science, Virginia State University 2021 Data Science for the Public Good Summer Scholars Program

EXTERNAL FUNDING

Posadas, B. (PD). (2024-2029). United States Department of Agriculture. NIFA. Hatch Project. Addressing User Needs in Usable Security for Agricultural Technologies. *Submitted*

Gardezi, M. (PD), **Posadas, B.** (2023-2026). United States Department of Agriculture. NIFA. Fostering Responsible Innovation and Governance of Big Data and Artificial Intelligence in Precision Agriculture. \$649,396.

Niewolny, K. (PD), Daubert, J., Mason, G., **Posadas, B.** (2023-2027). United States Department of Agriculture. NIFA. Agrability Virginia. \$732,347.

Chen, S. (PD), Faison, M., Holmes, C., Bz, I., Gupta, A., Benami, E., **Posadas, B.,** Holt, M., Alwang, J., Katz, A., Gohlke, J., Lambur, M. (2022-2027). NIFA Research and Extension Experiences for Undergraduates program. Internship in Data Analytics in Agriculture, Community, and Rural Economics (DATA-ACRE). \$748,412.

Maaz, G., **Posadas, B**. (senior personnel). (2022-2024). NSF. Testing a responsible innovation approach for integrating precision agriculture (PA) technologies with future farm workers and work - Supplement. \$499,995.

Chandel, A. (PI), **Posadas, B.,** White, R., Chappell, M., Parraga-Estrada, K. (2022-2023). University of Nebraska. Building synergistic data framework for cropping, livestock, and aquaculture producer network in Virginia. \$60,000.

Chandel, A. (PD), Chappell, M., Parraga-Estrada, K., **Posadas, B.,** White, R. (2022-2022). University of Nebraska USDA NIFA. ODF: National Agricultural Producers Data Cooperative: Building a Strategic Framework for Increasing Production and Driving Innovation. \$52,000.

Niewolny, K. (PD), Leonessa, A., Garland, M., **Posadas, B.** (2022-2023). USDA NIFA. AgrAbility Virginia Continuation Y4. \$184,774.

Niewolny, K. (PD), Robertson, T., Crutchfield, W., Leonessa, A., Srinivasan, D., **Posadas, B.,** Mason, G. (2019-2023). USDA NIFA AgrAbility Program. AgrAbility Virginia. \$719,749.

Niewolny, K. (PI), **Posadas, B.** (2020-2022). National Science Foundation & Computing Research Association. Computing Innovation Fellows 2020 Project. \$253,800.

Posadas, B. (PI). (2015). National Science Foundation. EAPSI: Multispectral Imaging for Marssonina Blotch Disease Detection in Fuji Apples. \$5,070.

INTERNAL FUNDING

Batarseh, F., Drape, T., **Posadas, B.** (02/21/2022-06/15/2022). CAIA/CCI SWVA Mini-Grants for Experiential Learning Development in Data Analytics and Cyberbiosecurity for Agriculture and Life Sciences competition. Cyberbiosecurity using Artificial Intelligence – A Regional Experiential Learning Program. \$4,000.

Walkup, K., Batarseh, F., Bainya, S., **Posadas, B.**, Perez-Torres, C. (10/01/2022-04/30/2023). The Center for Excellence in Teaching and Learning & the Office of the Executive Vice President and Provost. Faculty Teaching Group Grant. \$2,000.

Williams, M., Haugen, I., **Posadas, B.,** Friedel, C. (06/01/2022-05/31/2023). University Libraries Collaborative Research Grant. The good, the bad, and the ain't so pretty, Discovering the thoughts, and experiences of farmers during the late 20th and early 21st centuries. \$5,000.

Alwang, J., **Posadas, B.** (01/01/2022-08/31/2022). Policy Destination Area +Policy Research Supplement Fellowship. Remotely sensed data, climate change and poverty: A Zimbabwean study. \$10,500.

Chen, S., Archibald, T., Benami, E., Gupta, A., Haskins, C., Holmes, C., Holt, M., Lambur, M., **Posadas, B.,** Rutherford, T. (03/01/2021-06/30/2022). College of Agriculture and Life Sciences, Virginia Tech. VT Data Science for the Public Good: A CALS-VCE Collaboration. \$60,000.

Niewolny, K., Strawn, L., Benami, E., Morota, G., Duncan, S., Rutherford, T., **Posadas, B.** (08/01/2021-05/31/2022). College of Agriculture and Life Sciences Innovative and Transformative Graduate and Undergraduate Education Initiative. Smart Farm Seminar. \$2,258.

Ramsey, F., Duncan, S., Murch, R., Seyyedhasani, H., Sforza, P., **Posadas, B.,** Chantem, T., Gerdes, R. (2021). Virginia Tech Center for Advanced Innovation in Agriculture DSFAS Incentive Funding. Team Development for Cyberbiosecurity Guidelines for Smart Farms. \$1,000.

PUBLICATIONS

Book Chapters

Posadas, B.B., Ogunyiola, A., and Niewolny, K. (2022) Socially responsible AI assurance in precision agriculture for farmers and policymakers. In F.A. Batarseh & L. Freeman (Eds.), AI Assurance: Towards Valid, Explainable, and Ethical AI. Elsevier's Academic Press.

Journals

Iqbal, M. A., **Posadas, B. B.,** Qin, F., Liu, B., & Siddique, A. (2023) AgFAB – A Farmer-centered Agricultural Bower. EAI Endorsed Transactions on Industrial Networks and Intelligent Systems, 10(1), e2. https://doi.org/10.4108/eetinis.v10i1.2714

Posadas, B. B., Hanumappa, M., Niewolny, K., & Gilbert, J. E. (2021) Design and evaluation of a crowdsourcing precision agriculture mobile application for Lambsquarters, mission LQ. Agronomy, 11(10), 1951.

Posadas, B. B., & Gilbert, J. E. (2020) Regulating Big Data in Agriculture. IEEE Technology and Society Magazine, 39(3), 86-92.

Posadas, B. B., Hanumappa, M., & Gilbert, J. E. (2020) Early Development and Design of Crowdsourcing Agriculture Mobile Application for Lambsquarters. CLEI ELECTRONIC JOURNAL, 23(2).

Brinkley, J., Huff, E.W., **Posadas, B.,** Woodward, J., Daily, S.B., Gilbert, J.E. (2020) Exploring the Needs, Preferences, and Concerns of Persons with Visual Impairments Regarding Autonomous Vehicles. ACM Trans. Access. Comput. 13, 1, Article 3.

Brinkley, J., **Posadas, B.**, Sherman, I., Daily, S. B., & Gilbert, J. E. (2019) An Open Road Evaluation of a Self-Driving Vehicle Human–Machine Interface Designed for Visually Impaired Users. International Journal of Human– Computer Interaction, 1-15.

Posadas, B. B., Lee, W. S., Galindo-Gonzalez, S., Hong, Y., & Kim, S. (2016) State of Knowledge of Apple Marssonina Blotch (AMB) Disease among Gunwi Farmers. Journal of Biosystems Engineering, 41(3), 255-262.

Conference Papers

Posadas, B., Hanumappa, M., & Gilbert, J.E. (2019) Opinions Concerning Crowdsourcing Applications in Agriculture in D.C. VIII Latin American Conference on Human-Computer Interaction. Panama City, Panama., September 30 – October 4, 2019.

Huff, E., Dellamaria, N., **Posadas, B.** & Brinkley, J. (2019). Am I Too Old To Drive? Opinions of Older Adults on Self Driving Vehicles. In Proceedings of the 21st International ACM SIGACCESS Conference on Computers and Accessibility. ACM. October 28 – 30, 2019.

Sherman, I., **Posadas, B.**, Smarr, S., & Gilbert, J.E. (2018) My Finger, My Face, My Choice: A Preliminary Study Exploring the use of Biometric Authentication on Mobile Devices and the Implications for Voter Verification. Presented at Who Are You!? The Adventures in Authentication Workshop (WAY), Baltimore, MD, August 15 – 17, 2018.

Williams, A., Sherman, I., Smarr, S., **Posadas, B.**, and Gilbert, J. (2018) Human Trust Factors in Image Analysis. In 9th International Conference on Applied Human Factors and Ergonomics, Orlando, FL, July 22 – 26, 2018.

Williams, A., **Posadas, B.**, Prioleau, D., Laurenceau, I., and Gilbert, J. (2018) User Perceptions of Haptic Fidgets for Mobile Devices on Attention and Comprehension. In 9th International Conference on Applied Human Factors and Ergonomics, Orlando, FL, July 22 – 26, 2018.

Brinkely, J., **Posadas, B.,** Woodward, J., and Gilbert, J.E. (2017) Opinions and Preferences of Blind and Low Vision Consumers Regarding Self-Driving Vehicles: Results of Focus Group Discussions. In ASSETS '17 Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility, Baltimore, MD, pp. 290-299, October 20 – November 01, 2017.

Smarr, S., Sherman, I.N., **Posadas, B.**, and Gilbert, J.E. (2017) Prime III: Voting for a More Accessible Future. In ASSETS '17 Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility, Baltimore, MD, pp. 335-336, October 20 – November 01, 2017.

Posadas, B., Sherman, I., Mahendran, D., Burgalia, G. and Gilbert, J.E. (2017) A Focus Group Study of Blind Voters in Alachua County. In Proceedings of the Human Factors and Ergonomics Society 2017 Annual Meeting. Austin, TX, pp. 1111-1113. October 09 – 13, 2017.

Posadas, B. B., Lee, W. S., Hong, Y., & Kim, S. (2015) Detecting Marssonina Blotch Using Hyperspectral Imaging and Hierarchical Clustering. In 2015 ASABE Annual International Meeting (p. 1). American Society of Agricultural and Biological Engineers. New Orleans, LA, July 26 – 29, 2015.

Abstracts

Rathore, J., **Posadas, B.,** Gardezi, M., Kumar, R., Srivastava, C. (2023). Quantification of extreme weather effects on hilly mountain regions using satellite remote sensing: A case study from Chamoli District. American Geophysical Union annual meeting. San Francisco, California

Kitchin, E. C. A., Price, K., Kumari, S., McCall, D. S., & **Posadas, B.** (2023) Understanding Human Perceptions Limiting the Adoption of Precision Turfgrass Management [Abstract]. ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. <u>https://scisoc.confex.com/scisoc/2023am/meetingapp.cgi/Paper/152733</u>

Pérez-Quiñones, M. A., & **Posadas, B.** (2022). BOF: Hispanics in Computing. In Proceedings of the 54th ACM Technical Symposium on Computer Science Education V. 2 (pp. 1242-1242).

Other Writings

Garcia, A., Badillo-Urquiola, K., **Posadas, B.,** Roldan, W. <u>Latina Computing Professionals Panel at Tapia 2022!</u>, Association for Computing Machinery – Women in Computing. November 21, 2022.

Posadas, B. Facebook: connect, share, and fuel hate speech. Latinx Mic. August 1, 2018.

Posadas, B. How strategic is Chicago's "Strategic Subjects List"? Upturn investigates. Equal Future. June 22, 2017.

PRESENTATIONS

Invited Talks

Human-Computer Interaction in Agriculture, Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) National Diversity in STEM Conference, Portland, OR, October 26 – 28, 2023.

Socially Responsible AI Assurance in Precision Agriculture for Farmers and Policymakers, Genetics, Bioinformatics and Computational Biology (GBCB) Spring Seminar, Virginia Tech, Blacksburg, VA, April 12, 2023.

Building LatinX Community in Academia, Graduate School at Virginia Tech, Blacksburg, VA, October 5, 2022.

My STEM Journey, Women's Inclusion in Science, Technology, Engineering & Mathematics Program, Harvey Mudd College, virtual, August 27, 2022.

Using Agriculture to Introduce Programming and Data Science to Students, Center for Food Systems and Community Transformation, Virginia Tech, virtual, August 24, 2022.

Farm data: Challenges in Trust, Ownership and Dissemination, Social Informatics Research Group, Center for Human-Computer Interaction, Virginia Tech, virtual, March 4, 2022.

HCI In Agriculture, Design. Use. Build. (DUB) - University of Washington, virtual, March 2, 2022.

Big Data in Agriculture: Applications and Policy, Rural Computing Research Consortium, Michigan State University, virtual, January 14, 2022.

How Human-Computer Interaction is Changing Agricultural Technology, DePaul University - College of Computing and Digital Media (CDM) Research Colloquium, virtual, Apr 23, 2021.

Current State of Regulations of Big Data in Agriculture, Helping Agriculture Remain Vital through Engineering Science and Technology (HARVEST) Speaker Series, virtual, Nov 6, 2020.

Broadening Participation in Technology Policy, Association for Computing Machinery's Special Interests Group on Knowledge Discovery and Data Mining Conference, virtual, Aug 25, 2020.

Panelist

Learning to Serve More Populations at PWIs, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, San Diego, CA, September 18-20, 2024.

Addressing the Context of Hispanic, Latinx, and Chicanx students in CS at PWIs, eHSIs, and HSIs, STARS Computing Corps Celebration, Dallas, TX, September 16, 2023.

Food and Ag Tech Governance, Virtual Symposium - The Governance of New and Emerging Technologies, Virginia Tech, April 6, 2023.

Trajectory of Hispanic Women Professionals: Challenges and Strategies, ACM Special Interest Group on Computer Science Education (SIGCSE): Technical Symposium on Computer Science Education, Toronto, Ontario, CA, March 15 - 18, 2023.

Hispanic-Latinx Caucus Panel: Past, Present, Future, El Centro 4th Latinx Symposium, Virginia Tech, Blacksburg VA, March 2, 2023.

Faculty Panel, Undergraduate Consortium, AAAI Conference on Artificial Intelligence, Washington D.C., February 7 - 14, 2023.

Career Panel for Computer Science PhD Students. NSF S-STEM at the University of Florida, virtual, December 9, 2022.

Building a LatinX Community in Academia, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, Washington, D.C., September 7 - 10, 2022.

Becoming a Latina Computing Professional: Barriers and Accomplishments, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, Washington, D.C., September 7 – 10, 2022.

What I Wish I Knew as a Late-Stage PhD Student, ACM SIGCHI CHI Mentoring (CHIMe), virtual, May 7, 2021.

Dealing with Bias and Unfairness in AI, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, San Diego, CA, September 18 – 21, 2019.

Ethics in Data Science, Broadening Participation in Data Mining, Howard University, Washington, D.C., February 2 – 4, 2019.

Dealing with Bias and Unfairness in Machine Learning Algorithms, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, Orlando, FL, September 19 – 22, 2018.

Oral Presentations

Posadas, B., Niewolny, K. (2023) Using User-Centered Design Process to Determine Preferences for an Assistive Technology for Farmers. American Society of Agricultural and Biological Engineers Annual International Meeting, Omaha, NE, July 9-12, 2023.

Posadas, B., Ogunyiola A., Niewolny, K. (2023) User-Centered Design and AI Assurance in Precision Agriculture for Farmers and Policymakers. AI in Agriculture: Innovation and Discovery to Equitably Meet Producer Needs and Perceptions, Orlando, FL, April 17-19, 2023.

Posadas, B., Mitra, S., Poudel, S., Bhanushali, M. (2023) Usable Security in Agriculture. VT Center for Human-Computer Interaction Big Idea. Blacksburg, VA, March 17, 2023.

Posadas, B., Niewolny, K., & Gardezi, M. (2022) A Review of Low-Cost Unmanned Aerial Vehicles for Precision Agriculture: Implications for Sustainable Farming Systems. National Conference on Next Generation Sustainable Technologies for Small Scale Producers, Greensboro, NC, September 7-9, 2022.

Posadas, B., (2021) Design and Evaluation of Crowdsourcing Agriculture Mobile Application for Lambsquarters, Mission LQ. Society for the Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) National Diversity in STEM Conference, virtual, October 21 – 29, 2021.

Brinkely, J., **Posadas, B.,** Woodward, J., Daily, S., and Gilbert, J. (2018) Developing Personas with Disabilities to Aide in the Design of Accessible Automotive Systems. In 9th International Conference on Applied Human Factors and Ergonomics, Orlando, FL, USA, July 22 - 26, 2018.

Posadas, B., (2018) Issues of Big Data in Agriculture. CSCW 2018 Workshop on Rural Computing: Beyond Access & Infrastructure, Jersey City, NJ, November 4, 2018.

Gilbert, J., Eugene, W., Jones, J., Mack, N., Crawford, C., Thomas, S., **Posadas, B.** (2016) Designing for Inclusive Voting Technologies. Paper presented at the 7th International Conference on Applied Human Factors and Ergonomics, Orlando, FL, July 27 – 31, 2016.

Posadas, B. (2015) The Development of a binary classifier for the early detection of Marssonina Blotch Disease. Paper presentation at the meeting of the Society of Hispanic Professional Engineers (SHPE), Baltimore, MD, November 10 - 15, 2015. **Best Paper Award**

Workshops Led

Hispanics in Computing Birds of a Feather, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, San Diego, CA, September 18-20, 2024.

Hispanics in Computing Birds of a Feather, ACM Special Interest Group on Computer Science Education (SIGCSE): Technical Symposium on Computer Science Education, Portland OR, March 20 – 23, 2024.

Hispanics in Computing Birds of a Feather, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, Dallas, TX, September 13-15, 2023.

Hispanics in Computing Birds of a Feather, ACM Special Interest Group on Computer Science Education (SIGCSE): Technical Symposium on Computer Science Education, Toronto, Ontario, CA, March 15 – 18, 2023.

Undergraduate Consortium, AAAI Conference on Artificial Intelligence, Washington D.C., February 7 - 14, 2023.

Hispanics in Computing Birds of a Feather, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, Washington, D.C., September 7 - 10, 2022.

Hispanics in Computing Birds of a Feather, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, virtual, September 14 - 18, 2021.

Hispanics in Computing Birds of a Feather, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, virtual, September 16 - 19, 2020.

Hispanics in Computing Birds of a Feather, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, San Diego, CA, September 18 - 21, 2019.

Poster Presentation

Posadas, B. (2022) Socially Responsible AI Assurance in Precision Agriculture for Farmers and Policymakers. Poster session presented at the meeting of Networking and Information Technology Research and Development 30th Anniversary Symposium, Washington, D.C., May 25, 2022.

Posadas, B. (2019) User-Centered Design for Data Collection in Precision Agriculture. Poster presented at 16th Annual Yale Bouchet Conference, Yale University, April 5 - 6, 2019.

Posadas, B., (2018) A Survey of Low-Cost Precision Agricultural Technologies. Poster presented at GEM-ASEE Doctoral Engineering Research Showcase, Washington, D.C., January 21 – 22, 2018.

Posadas, B. B., Waters, S., Gilbert, J. (2017) Extending the Privacy Calculus to Smart Vehicles. Poster presented at the Transportation Planning Exchange Forum, Ponte Vedra, FL. August 10, 2017.

Posadas, B. (2015) Dimensionality Reduction Methods to Detect Marssonina Blotch Disease in Fuji Apple Leaves. Poster presentation at Graduate Research Day at University of Florida, Gainesville, FL. October 27, 2015.

Posadas, B. (2015) Machine Learning Algorithm for Detection of Marssonina Blotch Disease in Fuji Apple Leaves. Poster presentation at Agricultural and Biological Engineering Department Research Day at University of Florida, Gainesville, FL. October 14, 2015.

DIVERSITY, EQUITY, AND INCLUSION (DEI) ACTIVITIES

- American Association of Hispanics in Higher Education (AAHHE) Faculty Fellow, 2023-2024
- Zoned In Badge for completing Virtual Safe Zone 101, VirTual Trans Safe Zone 101, and a VirTual Safe Zone elective course, Spring 2023
- Committee Member, Diversity Committee, School of Plant and Environmental Sciences, Virginia Tech, 01/2022-04/2024

- Inclusive Syllabus Design Training, hosted by Geosciences HHMI Inclusive Excellence Faculty Scholars, 12/2020
- Mentor, VineCorps, Cheverly, MD, 12/2019-12/2022
- Executive Committee Member, Hispanics in Computing Organization, 10/2018-present
- McNair Peer Advisor, McNair Scholars Program, University of Florida, 09/2016-05/2018
- Committee Member, Diversity and Inclusion Student Group, University of Florida, 07/2016-05/2018
- Co-founder, Latino-Hispanic Organization of Graduate Students, University of Florida, 08/2014-05/2018
- Graduate Ambassador, Society of Hispanic Professional Engineers, University of Florida, 01/2015-01/2016

SERVICE AND EXTENSION

Journal and Conference Papers Reviewing

- Association for Computing Machinery's Special Interest Group on Computer-Human Interaction Conference
- Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing Conference
- MDPI Sustainability Journal
- Society for the Advancement of Chicanos and Native Americans in Science Conference
- Advancing Diversity, Inclusion, and Social Justice through Human Systems Engineering
- Ingeniería e Investigación Journal, Ciudad Universitaria, Bogotá, Colombia
- Human Factors and Ergonomics Society Annual Meeting
- Interaction Design and Children Conference
- Computers and Electronics in Agriculture
- American Society for Engineering Education
- Grace Hopper Celebration of Women in Computing

Review Panels

- USDA Reviewer 2024
- NSF ENG Reviewer 2023
- NSF CISE Reviewer 2021

Award and Honors Reviewing

- NCWIT Aspirations in Computing (AiC) Collegiate Award
- NCWIT Aspirations in Computing (AiC) high school Award
- Virginia Tech's Bouchet Society

Other Conference Service

- Mentor Judge, Society for the Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) National Diversity in STEM Conference, Portland, OR, October 26 – 28, 2023.
- Moderator, AI applications in Crop Yield and Maturity Oral Presentations, AI in Agriculture: Innovation and Discovery to Equitably Meet Producer Needs and Perceptions, Orlando, FL, April 17 – 19, 2023.
- Mentoring Chair, Undergraduate Consortium, AAAI Conference on Artificial Intelligence, Washington D.C., February 7 – 14, 2023.
- Poster Judge, Association for Computing Machinery's Richard Tapia Celebration of Diversity in Computing, Washington, D.C., September 7 10, 2022.
- Mentor Judge, Society for the Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) National Diversity in STEM Conference, virtual, October 21 29, 2021.
- Mentor, Explore Computer Science Research (ExploreCSR) at the University of Rhode Island Workshop, virtual, April 8 10, 2021.

University Service

- Committee Member, Center for Advanced Innovation in Agriculture (CAIA) Graduate Education Committee, Virginia Tech, 01/2023-04/2024
- Committee Member, Search Committee for Organic and Sustainable Vegetable Assistant Professor, School of Plant and Environmental Sciences, Virginia Tech, 2023
- Graduate Student Recruiter, Herbert Wertheim College of Engineering, University of Florida, 09/2015-05/2018
- Committee Member, Engineering Student Leadership Advisory Board, University of Florida, 09/2016-05/2017

01/2022-present

10/2016-present

Extension Advisory Board

• Committee Member, Advisory Board for AgrAbility, 01/2021-04/2024

Extension – Mobile Applications

• Mission LQ, Android/iPhone application for uploading data on lambsquarters, 2019

FELLOWHIPS, HONORS AND AWARDS

American Association of Hispanics in Higher Education (AAHHE) Faculty Fellow Leadership & Service Award for 2023 YMCA at VT International Women's Day Virtual Safe Zone Zoned In Badge Principles of Effective Teaching Certificate CRA Computing Innovation Postdoctoral Fellow Edward Alexander Bouchet Graduate Honor Society Virginia Tech Future Faculty Fellow Stanford Postdoctoral Recruitment Initiative in Sciences and Medicine Fellow Media Democracy Fund PhDx Fellow Computers and Electronics in Agriculture Outstanding Contribution in Reviewing Outstanding Cultural Organization, UF Florida Education Fund McKnight Doctoral Fellow University of Florida Graduate School Fellow University of Florida Board of Education Fellow Gamma Sigma Delta Agriculture Honor Society	2023 - 2024 2023 2023 2022 $2020 - 2022$ 2019 2019 2019 $2017 & 2018$ 2017 2017 $2016 - 2021$ $2016 - 2020$ 2016 2016
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Computers and Electronics in Agriculture Outstanding Contribution in Reviewing	2017
Outstanding Cultural Organization, UF	2017
Florida Education Fund McKnight Doctoral Fellow	2016 - 2021
University of Florida Graduate School Fellow	2016 - 2020
University of Florida Board of Education Fellow	2016
Gamma Sigma Delta Agriculture Honor Society	2016
J. Michael Rollo Diversity Impact Award, UF	2016
Outstanding Gator Engineer M.S. Scholar, UF	2016
NSF East Asia and Pacific Summer Institute (EAPSI) Fellow	2015
Alpha Epsilon Agricultural, Biological & Food Engineering Honor Society	2015
Alpha Epsilon Lambda National Graduate Students Honor Society	2015
Tau Beta Pi National Engineering Honor Society	2015
Society of Hispanic Professional Engineers RISE Symposia Best Paper Award	2015

PROFESSIONAL AFFILIATIONS AND MEMBERSHIPS

- American Association for the Advancement of Science (<u>AAAS</u>)
- Association for Computing Machinery (<u>ACM</u>)
- Human Factors and Ergonomics Society (<u>HFES</u>)
- Institute of Electrical and Electronics Engineers (<u>IEEE</u>)
- Society of Hispanic Professional Engineers (<u>SHPE</u>)
- Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
- American Society of Agricultural and Biological Engineers (<u>ASABE</u>)