BRIANNA B. POSADAS, Ph.D.

Cell: (951) 387-0022 | briannaposadas.com | linkedin.com/in/briannaposadas | bri.posadas@gmail.com

EDUCATION

Doctor of Philosophy in Human-Centered Computing   May 2020
Concentration in Communicating Privacy Policy
Dissertation: Crowdsourcing Ground Truth Data Collection for Precision Agriculture
Using a Citizen Science Mobile Application
University of Florida, Gainesville, FL

Master of Science in Agricultural Engineering   May 2016
Minor in Agricultural Education and Communication
Thesis: Development of Detection Algorithms for Apple Disease Using Hyperspectral Data
University of Florida, Gainesville, FL

Bachelor of Science in Engineering   May 2013
Concentration in Psychology
Harvey Mudd College, Claremont, CA

RESEARCH INTERESTS

Precision Agriculture, User-Centered Design, Citizen Science, Big Data and Ethics in Agriculture, Technology Policy

RESEARCH EXPERIENCE

RESEARCH POSITIONS

Postdoctoral Technology Fellow   May 2020 – present
Media Democracy Fund
- Assess the usability, accessibility, and security of incident reporting systems
- Conduct a needs assessment of the leadership council and league members
- Work with disinformation researchers to identify the specific technological questions and needs that will drive the research

Graduate Research Assistant   Aug 2016 – May 2020
Computer and Information Science and Engineering, University of Florida, Gainesville, FL
- Design, implement, and evaluate usability studies with Prime III, a voting machine
- Write policy recommendations for autonomous vehicle use with communities with disabilities
- Conduct research and publish papers on human trust in computer programs and usability of fidget devices
- Complete qualification exam entitled *A Survey of Low-Cost Precision Agricultural Technologies*

Research Assistant   Nov 2015 – Dec 2017
Family and Nutrient Program, University of Florida, Gainesville, FL
- Created yearly reports for each of the counties involved in the FNP using Excel and macros
- Collected food waste data from Title 1 elementary schools for Farm to School program
- Wrote python program to merge different reports into one readable Excel file
- Aided team data analysis with python code and yearly reports

Graduate Research Assistant   Aug 2014 –May 2016
Agricultural and Biological Engineering, University of Florida, Gainesville, FL
- Developed detection algorithms for apple disease using hyperspectral images
- Planned data collection strategy of hyperspectral images of apple leaves
- Implemented data collection proposal in Gunwi, South Korea with NSF support
- Wrote master's thesis, journal and conference publications

JOURNAL PAPERS

Posadas, B. & Gilbert, J.E. (2020) *Regulation of Big Data in Agriculture.* IEEE Technology and Society Magazine. *Accepted*

Posadas, B. B., & Gilbert, J.E. (2020) *Early Development and Design of Crowdsourcing Agriculture Mobile Application for Lamb's Quarters.* Special Issue Latin-American Center for Informatics Studies. *Submitted*

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. September 30 – October 4, 2019, Panama City, Panama.

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.

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

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), August 15-17, 2018, Baltimore, MD, USA.

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, USA. 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, USA. 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, USA, 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, USA, 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, USA, pp. 1111-1113.

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.

PRESENTATIONS

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

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) *A Survey of Low-Cost Precision Agricultural Technologies.* Poster presented at GEM-ASEE Doctoral Engineering Research Showcase, Washington, D.C.

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.

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.

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. **Best Paper Award**

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.

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.

INVITED TALKS

Dealing with Bias and Unfairness in AI, ACM Richard Tapia Celebration of Diversity in Computing, Sep 18-21, 2019. San Diego, CA.

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

Dealing with Bias and Unfairness in Machine Learning Algorithms, ACM Richard Tapia Celebration of Diversity in Computing, September 19-22, 2018. Orlando, FL.

OTHER WRITINGS
Posadas, B. *How strategic is Chicago's "Strategic Subjects List"? Upturn investigates.* Equal Future. June 22, 2017.
Posadas, B. *Facebook: connect, share, and fuel hate speech.* Latinx Mic. August 1, 2018.

TEACHING EXPERIENCE

Instructor   Jan 2020 – present
Washington English Center, Washington D.C.
- Co-lead ESOL level 2B weekly course
- Manage classroom of international adult learners
- Assess, record, and communicate student progress

Graduate Teaching Assistant   Aug 2015 – Dec 2015
Agricultural and Biological Engineering, University of Florida, Gainesville, FL
- Wrote grant applications to fund undergraduate student thesis projects
- Held office hours for students working on their thesis projects

CodeIT Day Instructor   Oct 2015
Computer and Information Science and Engineering, University of Florida, Gainesville, FL
- Taught 30 students programming using LEGO MINDSTORMS EV3 Software

OUTREACH EXPERIENCE

Mentor   Dec 2019 – present
VineCorps, Cheverly, MD
- Tutor high school students in academic subjects during weekly sessions
- Advise high school students through the college application process including essay writing,
  FAFSA submissions and interview prep

McNair Peer Advisor   Sep 2016 – May 2018
McNair Scholars Program, University of Florida, Gainesville, FL
- Mentored 4 undergraduate students in graduate school application process
- Reviewed students' scientific papers and presentations for conferences

PROFESSIONAL EXPERIENCE

Interviewer   Aug 2014 – present
InitialView, Beijing, China
- Conducted college admissions interviews with an average of 5 high students per week
- Recorded and transcribed 15-minute college admissions interviews with students from China, Korea, and Taiwan
- COVID-19: Proctored entrance math exam remotely for 25 high students

Media Democracy Fund PhDx Fellow   Jun 2018 – Aug 2018
National Hispanic Media Coalition, Washington D.C.
- Researched Facebook's policy on hate speech and wrote blogpost
- Attended meetings and conferences to collaborate with other civil rights organizations
- Contributed to FEC and FCC comments

Media Democracy Fund PhDx Fellow   May 2017 – Jul 2017
Upturn, Washington D.C.
- Researched Chicago's Strategic Subjects List and analyzed de-identified dataset
- Contributed to weekly Equal Futures newsletter
- Edited pre-report viewing of body camera footage memo

Academic Consultant   Jun 2013 – Apr 2014
AIC Education, Shenzhen, China
- Developed a macro program to automatically consolidate and analyze student results
- Conducted research for new file-sharing and email client for all employees and students
- Advised and edited essays for 10 high school students who are applying to colleges in the US
- Established company-wide Common Application training and analysis

SERVICE

Academic Journal and Conference Peer Reviewer   Oct 2016 – present
- 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
- Heliyon
- Grace Hopper Celebration

Committee Member   Jul 2016 – May 2018
Diversity and Inclusion Student Group, University of Florida, Gainesville, FL
- Served on advisement board with undergraduate and graduate students throughout the university

Graduate Student Recruiter   Sep 2015 – May 2018
Hebert Wertheim College of Engineering, University of Florida, Gainesville, FL
- 2015 - Society of Hispanic Professional Engineers (SHPE) Conference, Baltimore, MD
- 2015 & 2017 - Junior Preview, University of Florida, Gainesville, FL
- 2016 - 2018 - Spring Visit, University of Florida, Gainesville, FL

Co-founder, President (2016-2018), Vice President (2015), Treasurer (2014)   Aug 2014 – May 2018
Latino-Hispanic Organization of Graduate Students, University of Florida, Gainesville, FL
- Founded organization to promote professional and academic development of Latino/Hispanic graduate students
- Organized social events for students and professors to foster mentoring relationships and celebrate cultural events
- Won outstanding cultural organization for the University of Florida (2017)

Committee Member   Sep 2016 – May 2017
Engineering Student Leadership Advisory Board, University of Florida, Gainesville, FL
- Provided advice to Herbert Wertheim College of Engineering administration

Graduate Ambassador   Jan 2015 – Jan 2016
Society of Hispanic Professional Engineers, University of Florida, Gainesville, FL
- Advised undergraduate members on the graduate admissions process

AWARDS, FELLOWSHIPS, HONOR SOCIETIES, AND SCHOLARSHIPS

AWARDS
Computers and Electronics in Agriculture Outstanding Contribution in Reviewing	2017
J. Michael Rollo Diversity Impact Award	2016
Outstanding Gator Engineer M.S. Scholar	2016
Society of Hispanic Professional Engineers RISE Symposia Best Paper Award	2015

FELLOWSHIPS

Media Democracy Fund PhDx Fellow	2017 & 2018
Florida Education Fund McKnight Doctoral Fellow	2016 – 2021
University of Florida Graduate School Fellow	2016 – 2020
University of Florida Board of Education Fellow	2016
NSF East Asia and Pacific Summer Institute (EAPSI) Fellow	2015

HONOR SOCIETIES

Edward Alexander Bouchet Graduate Honor Society	2019
Gamma Sigma Delta Agriculture Honor Society	2016
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

SCHOLARSHIPS

Stanford Postdoctoral Recruitment Initiative in Sciences and Medicine (PRISM)	2019
Computer and Information Science and Engineering Graduate Scholarship	2018 & 2019
SACNAS ASSIST Travel Grant	2018
Microsoft Tapia Conference Scholarship	2018
ACM Tapia Celebration of Diversity in Computing Scholarship	2017
Grace Hopper Celebration Scholarship	2016
University of Florida Graduate Assistantship	2014 – 2016

SKILLS

- GIS: ENVI, ArcMap, MATLAB including Image Processing Toolbox and Simulink
- Statistical Analysis Software: VBA and Microsoft Office, R, SPSS
- Coding: Python, JavaScript, Java, Jupyter, GitHub
- Mobile application development using Kinvey Studio
- User Design: interviews, focus groups, surveys, usability testing, personas and scenarios, storyboarding, wireframes (Balsmiq & Invision), low and high fidelity prototyping, AutoCad, MAXQDA
- Languages: English (native language), Spanish (conversational), Mandarin (basic knowledge)

MEMBERSHIPS

- American Association for the Advancement of Science
- Association for Computing Machinery
- Human Factors and Ergonomics Society
- Institute of Electrical and Electronics Engineers
- Society of Hispanic Professional Engineers
- Society for Advancement of Chicanos/Hispanics and Native Americans in Science