Olivia K. Hernandez

Citizen U.S.A., Born in New York, N.Y.

Department of Integrated Systems Engineering, The Ohio State University

(614) 599-5235 (mobile) Hernandez.127@osu.edu

EDUCATION

PhD 2021 (Requirements completed December 2020, degree will be conferred May 2021)
OHIO STATE UNIVERSITY, Industrial and Systems Engineering. Human Factors and Operations Research
Dissertation Title: *Designing Simulation-Based Active Learning Activities Using Augmented Reality and Sets of Offline Games.*
Co-advised by Theodore T. Allen and Emily S. Patterson
Research funded by Defense Health Administration Phase II STTR with Unveil, LLC

Certification 2014 **HUMAN FACTORS INTERNATIONAL,** Certified Usability Analyst

MS 2009 **OHIO STATE UNIVERSITY**, Industrial and Systems Engineering. G.P.A. 3.81/4.00
Thesis Title: *The Potential for Tele-Presence to Assist and Aid with the Supervision of Medication Self-Management*.

BA 2007 **DENISON UNIVERSITY**, Major in English Writing, Minor in Mathematics

RESEARCH INTERESTS

Clinical informatics, simulation, experimental design, data science, human factors engineering, game-based training, active learning

AWARDS

- Ohio State University Graduate Fellowships for Femtosecond Laser Research (Fall 07-Winter 08) and Safety (Winter-Spring 09), Full Tuition
- Faculty Scholarship for Achievement at Denison University, Full Tuition
- National Achievement Scholarship
- Vinton R. Shepard Memorial Scholarship at Denison University

PUBLICATIONS

1. Hernandez, O. K., San Miguel, C. E., Militello, L., Sushereba, C., Wolf, S., Allen, T. T., Bahner, D., Amin, S., Mansour, L., Chirumamilla, V., & Patterson, E. S. (2020, September). Assessing Whether Recognition Skill Development is Enhanced with Augmented Reality-Based Training as Compared to Traditional Training: A Laboratory Study. In *Proceedings of the International Symposium on Human Factors and Ergonomics in Health Care* (Vol. 9, No. 1, pp. 51-55). Sage CA: Los Angeles, CA: SAGE Publications.

2. Allen, T. T., Hernandez, O. K., Roychowdhury, S., & Patterson, E. S. (2020, September). Practical Optimal Scheduling for Surgery. In *Proceedings of the International Symposium on Human Factors and Ergonomics in Health Care* (Vol. 9, No. 1, pp. 10-14). Sage CA: Los Angeles, CA: SAGE Publications.
3. Allen, T. T., Hernandez, O. K., & Alomair, A. (2020, May). Optimal off-line experimentation for games. *Decision Analysis*, *17(*4), 277-298.
4. Allen, T. T., Yang, M., Huang, S., & Hernandez, O. K. (2020). Determining resource requirements for elections using indifference-zone generalized binary search. *Computers & Industrial Engineering, 140,* 106243.
5. Allen, T. T., Yang, M., Huang, S., & Hernandez, O. (2020). Method to allocate voting resources with unequal ballots and/or education. *MethodsX*, 100872.
6. Militello, L., Sushereba, C., Hernandez, O., & Patterson, E. S. (2019, September). Augmented Reality Adaptive Training Principles. In *Proceedings of the International Symposium on Human Factors and Ergonomics in Health Care* (Vol. 8, No. 1, pp. 72-75). Sage CA: Los Angeles, CA: SAGE Publications.
7. Hernandez, O. K., Allen, T. T., & Samuelson, D. A. (2017). Wargames Illuminate Cyber Threat Discovery. *OR/MS Today, 44(*4*).*
8. Hernandez, O. K., Sommerich, C. M., & Woods, D. D. (2011). Telepresence as an aid for medication self-management. *Ergonomics in Design* (IF:0.47), *19*(3), 15-23.
9. Chin-Parker, S., Hernandez, O., & Matens, M. (2006). Explanation in category learning. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 28, No. 28).

WORK EXPERIENCE

The Ohio State University, Columbus, OH
Graduate Research Associate, Spring 2017, Fall 2018 – Fall 2020

- Assessing Augmented Reality-Based training software for teaching medical students how to diagnose tension pneumothorax, airway obstruction, and hemorrhage cases
- Paper at the 2020 Human Factors in Healthcare Symposium (presentation canceled due to COVID-19)
- Presented at the 85th MORS Symposium about Wargaming and Cyber Issues
- Presented at the 2018 Joint Research Conference on Statistics in Quality, Industry and Technology

The Ohio State University, Columbus, OH
Graduate Teaching Associate, Fall 2017 – Spring 2018

- Guest lecturer for ISE 4120, Quality and Reliability Engineering
- Graded and supported statistical quality control and quality management systems
- Co-taught Lean Six Sigma tools and project-related instruction

JP Morgan Chase, Columbus, OH
Business Banking Business Analyst, 2012 – 2016, Assistant Vice President (highest title)

- Liaison between development and business on requirements, reconciling conflicts and implementing changes
- Utilizing knowledge capital to manage complex projects throughout their lifecycles while partnering with key stakeholders
- Defining, validating, clarifying and documenting business requirements with cross-functional teams while managing scope
- Taking ownership of applications, design reviews, and regulatory projects
- Accomplishments: Learning new tools and taking training to supplement hands-on experience; reviewing and documenting new processes while asking questions to ensure understanding; successfully working with a vendor on a first-mover product; meeting tight and dynamic timelines; member of the Business Banking Diversity Advisory Group (recognized for outstanding leadership)

SKILLS

JMP/SAS statistical software, Minitab, statistical quality control, experimental design, usability testing, heuristic reviews

INTERESTS

Expert custom-designed cakes, promoting underrepresented minorities including Blacks, women, and Latinx in engineering and management