

# Lena DeSantis

## Senior UX Researcher

[lena.desantis@yahoo.com](mailto:lena.desantis@yahoo.com) | 713-576-9880 | Sugar Land, TX

### SUMMARY

I am a driven, motivated, and multifaceted professional with solid and progressive 16 years of experience in the oil & gas industry and at NASA. I leverage my engineering background and research skills to develop data driven user insights to inform design changes and deliver business value and increase revenue. I am a self-starter and skilled in collaborating with all members of an Agile team to achieve business and financial objectives. I am a capable communicator with excellent written and verbal skills, a confident and knowledgeable leader and team player, a strong problem solver with ability to focus on detail-oriented challenges.

### SKILLS

Qualitative & Quantitative UX Methods



Statistical Analysis



Design Thinking & Strategy



Usability Testing



### PROFESSIONAL EXPERIENCE

#### Senior UX Researcher

September 2018 to Present

#### Royal Dutch Shell via Disys

- Led and implemented user research activities and collaborated with Product Managers, Designers, and Developers to develop an MVP to improve efficiency and effectiveness of employees responding to customer inquiries which is estimated to save \$8 million per year – MVP was delivered within 11 months and \$800k
- Conducted remote user feedback and usability testing via Skype which directly impacted feature development and prioritization of MVP
- Led and implemented user research activities and collaborated with Product Owner and Designer to develop wireframes for an MVP to create a data dashboard for employees which is estimated to save \$10 million per year in employee time
- Conducted remote user feedback via Skype which uncovered crucial needs for the data dashboard which are estimated to save 5+ hours per week

#### Senior UX Researcher

April 2017 to September 2018

#### Schlumberger via Aquent

- Designed, executed, and analyzed user interviews and contextual inquiries at 4 US facilities and one international facility to further the development of an MVP to increase the efficiency of documenting job execution to comply with API Q2 requirements with an estimated time savings of 2 hours per job
- Conducted on-site usability testing and distilled insights into actionable issues for the design and development team, and worked with the team to develop solutions for the issues
- Tactical A/B testing to provide quick user feedback on a hotly contested design preference

**Senior UX Researcher**  
**GE Oil & Gas**

**October 2016 to March 2017**

- Liaison with the Data Science team translating data science needs to UX design team, leveraging my engineering background to understand the analytics for an offshore refinery
- Assisted in defining a UX research framework to be used with customers requiring an enterprise solution, framework from discovery to participatory design workshop
- Identified data requirements for a midstream pipeline enterprise solution, researching methods of obtaining the data and translating this information to be valuable for UX designers

**Senior Human Factors Engineer**  
**Bechtel Corporation via PHS Concepts, Inc.**

**May 2013 to March 2016**

- Lead for maintaining and updating the deviation log which captured the HFE non-conformances that could not be corrected through redesign, including drafting deviations and reviewing deviations from other specialists, working with the client to ensure the administrative solution was adequately described – saved Bechtel an estimated \$100 million in construction costs
- Conducted vendor inspection trips to review skid/equipment for compliance with project requirements, created trip reports to summarize findings from the inspection
- Conducted inspection trips to Module Fabrication Yards in Malaysia, Indonesia, and China to ensure compliance with project requirements, created trip reports to summarize findings from the inspection
- Created materials and conducted training of field engineers in the Chinese and Indonesian Mod Yards on the client human factors requirements and Australian regulations

**Senior Human Factors Engineer**  
**Lockheed Martin**

**April 2003 to May 2013**

- Project Manager for human in the loop (HITL) evaluations with 3 direct reports, identified key milestones and critical path to deliver value to the Advanced EVA suit team, managed a yearly budget of \$250k
- Human in the loop usability evaluations of the Vehicle Integration Element (VIE) umbilical interface to the EVA suit, conducted in the full-size mock-up of the Crew Exploration Vehicle (CEV), responsibilities included experiment design, conduct evaluation, and analysis of results; human task performance
- Heuristic and usability evaluations of a wrist mounted electronic procedure display for the planetary EVA suit, provided display layout recommendations to design team, developed and conducted usability evaluation
- Heuristic and usability evaluations of a helmet mounted electronic procedure display for the planetary EVA suit, provided display layout recommendations to design team, developed and conducted usability evaluation
- Integrated Human Factors Evaluation Process Lead for International Space Station (ISS) Payload Hardware (2006 to 2013) including verification of human factors requirements for ISS payload hardware, providing recommendations for hardware design changes to comply with requirements, and providing recommendations to improve the usability of the hardware

## EDUCATION

Master of Science (MS) Biomedical Engineering, University of Iowa 1998

Bachelor of Science (BS) Bioengineering, Texas A&M University 1997

## AWARDS

2015 – Bechtel Individual Achievement Award

2012 – Award for Outstanding Contributions to NASA's Human Research Program

2011 – NASA Ames Honor Award, Ultrasound 2 Project Team

2011 – Wyle Bioastronautics Bravo Award, Adjustable Mock-up Team

2011 – Lockheed Martin Team Award, Adjustable Mock-Up for Integrated Vehicle, Seat, and Suit Evaluations Team

2010 – Lockheed Martin Spot Award, Joint Orion NBL EVA Mock-up Evaluation Team

## PUBLICATIONS

Chappell, S., Norcross, J., Clowers, K., Clark, T., Cowley, M., Harvill, L., DeSantis, L., Morency, R., Vos, J., and Gernhardt, M. (2010) **Final Report of the Integrated Parabolic Flight Test: Effects of Varying Gravity, Center of Gravity, and Mass on the Movement Biomechanics and Operator Compensation of Ambulation and Exploration Tasks**, [TP-2010-216137](#), JSC Technical Report

Norcross, J., Lee, L., Clowers, K., Morency, R., DeSantis, L., De Witt, J., Jones, J., Vos, J., and Gernhardt, M. (2009) **Feasibility of Performing a Suited 10-km Ambulation on the Moon Final Report of the EVA Walkback Test (EWT)**, [TP-2009-214796](#)

DeSantis, L., Whitmore, M. (2007). Collaborative Human Engineering Work in Space Exploration Extravehicular Activities (EVA). Department of Defense Human Factors Engineering Technical Advisory Group Meeting 57; 14-17 May 2007; Portsmouth, VA; United States.

*Full list of awards and publications available on request*