

Nathan Sonnenfeld, Human Factors Researcher

Selected Experience

Vice President, STEMCORPS INC.

Aug '17 – Present

Empowering tomorrow's unsung heroes. STEM advocacy & advancement through modeling & simulation industry and community partnerships.

Teacher (STEM), Volusia County Schools

Mar '17 – May '19

Iteratively designed & delivered blended STEM learning experiences to 500+ students based on user research.

Research Assistant, Human Factors Department (ERAU)

Aug '13 – May '17

Tested & evaluated interfaces & user behavior. Analyzed data. Communicated results. Executed basic & applied HF research.

Research Psychologist Intern, Quantum Improvements Consulting

Jun '16 – Aug '16

Supported research & development tasks for a (then start-up) contractor specializing in training research.

Student Assistant, Multi-Disciplinary Bioengineering Laboratory Mechanical Engineering Department (ERAU)

Jul '14 – Jan '16

Back-stage support (inventory, grant-writing, collaborating, outreach) for multidisciplinary engineering team saving babies from congenital heart defects and hip dysplasia.

Education

M.S. Human Factors | 3.9 GPA

Embry-Riddle Aeronautical University | 2017

B.S. Human Factors Psychology

Embry-Riddle Aeronautical University | 2015

Interface Design, Testing, & Evaluation

Minds & Machines (Canvas & Google LMS); Legacy+, FutureSelf, and InnoVoter (app designs); underwater virtual reality headset and WMSD biofeedback system (product designs); automotive comparison tool and therapist website (redesigns), mathematics nonprofit program evaluation.

HF & Design Skills

Design Research & User/Domain Models

- Ethnography & Interviewing
- User Personas, Profiles, & Scenarios
- User Research & Experimental Design
- Task Analysis, Activity Diagrams
- Needs & Requirements Elicitation

Prototyping

- Requirements Writing
- Storyboarding, Wireframing, Mock-Ups

Design Evaluation

- Usability Testing & Heuristic Evaluation
- Performance Assessment
- Data Analysis & Visualization

Design Tools

Adobe (XD, InDesign, Illustrator, Comp, Capture); Statistics & Modeling (JASP Statistics; IBM SPSS, Rockwell Arena); Productivity (Microsoft Suite, Google Suite)

Awards

Best Student Paper Award (2016)

Education Technical Group of the Human Factors and Ergonomics Society.

Ignite Undergraduate Research Grants

~\$20,000 for teams' virtual experience and bioengineering R&D (2014-2016)

Example Research

Sherwood, S., Sonnenfeld, N.A., & Weiler, D. (October, 2015). Fidelity requirements for effective live-virtual-constructive training of Navy F/A-18 pilots: An exploratory survey study. Poster presentation at the 2015 Human Factors and Ergonomics Society Annual Meeting, Los Angeles, California.