Aaron Crowson

User Experience Researcher | PhD Student in Human Factors

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Education

2017 - Present	***North Carolina State University***, Raleigh, NC ***Doctor of Philosophy in Psychology***; Human Factors and Applied Cognition; GPA: 4.00 ***Advisor***: Dr. Christopher B. Mayhorn ***Expected Thesis Defense***: Dec 2023
2012 - 2016	***Winona State University***, Winona, MN ***Bachelor of Arts in Psychology***; GPA: 3.50

Professional Experience

March 2021 - Present: UX Researcher & Designer
Joint Special Operations Command, Fort Bragg, NC
- Created user interfaces for four applications based on research and lead the development of their implementation
- Conducted a number of research projects to improve system usability for existing software application in support of the command's missions
- Created and conducted user interviews with the purpose of gaining insight into user problem sets.
- Offered solutions to complex problems within the workflow of users using that to develop appropriate software design to match
- Engaged in biweekly stakeholder meetings to manage expectations and showcase application progress

January 2019 - January 2022: Primary Instructor
North Carolina State University, Raleigh, NC
- Classroom instructor for undergraduate courses in *abnormal psychology* and *cognitive processes*.
- Learned instruction material outside field of study
- Developed and implemented lesson plans
- Created and administered exams for student assessment
- Created final projects to reflect student learning
- Adapted teaching methods to fit an online learning environment

May 2018 - October 2019: Graduate Research Assistant
Applied Cognitive Psychology Lab, North Carolina State University, Raleigh, NC
Under the Direction of Dr. Jing Feng
- Collected and analyzed data using Excel and SPSS
- Recruited participants through phone calls
- Developed research stimulus from a STISIM driving simulator
- Identified and photoshopped research stimulus
- Developed and wrote a standard operating procedure
- Managed a small team to see successful completion of data collection

Aug 2017 - Present: Graduate Researcher
Ergonomics and Aging Lab, North Carolina State University, Raleigh, NC
Under the Direction of Dr. Christopher B. Mayhorn
- Wrote and published manuscripts
- Wrote and published conference proceedings papers
- Presented research findings at professional conferences (eg: HFES)
- Developed and implemented Qualtrics online surveys
- Directed the development and implementation of a unity engine game for research
- Analyzed data using SPSS and Excel
- Mentored two undergraduate students on their individual research project designs/implementations

May 2016 - Jan 2017: Health Sciences Researcher
Mayo Clinic, Rochester, MN
- Conducted data entry using Redcap
- Conducted data analysis and interpretation
- Wrote and published a first author paper in the Journal of Rheumatology
- Presented research findings at an international conference in London
- Handled physical and digital patient records
- Conducted an extensive international literature

Relevant Graduate Projects

Training with Koda: A Free Website for the New Dog Owner Based on Learning and Motivation Principles. Learning and Motivation Psychology (Spring 2020). North Carolina State University with *Dr. Doug Gillan*.
- Developed a website to inform new dog owners about the practices for training their puppies.

- Utilized principles from Learning and Motivation literature to support training tips providing a unique tool to new dog owners as compared to current training websites

The Human Factors Wiki Project: Development and Evaluation. Ergonomic Performance Assessment (Fall 2019). North Carolina State University with *Dr. Doug Gillan*.
- Developed a wiki/blog hybrid website to house critical information on Human Factors methods and definitions for easy access to outsiders interested in the field
- Evaluated the usability of the website utilizing task analysis, heuristic evaluations, and user surveys
- Presented recommendations for improvement for a more user friendly website based on analyses

Engage Usability Project: Creating an Interactive Tutorial to Encourage Gameplay. Human Factors Psychology (Fall 2017). North Carolina State University with *Dr. Anne McLaughlin*.
- Evaluated an educational game entitled "Engage" for critical usability issues within the tutorial
- Designed a new mock-up tutorial using Powerpoint based on task analyses, heuristic evaluations, and universal design principles
- Tested new tutorial on participants using think alouds and user surveys
- Presented findings to stakeholders explaining how to best improve the usability of "Engage's" tutorial

Publications

Manuscripts and Proceeding Papers

Crowson, A., Colligan, R., Matteson, E., Davis, J., Crowson, C (2017). Explanatory style in patients with rheumatoid arthritis: an unrecognized predictor of mortality. *Journal of Rheumatology*.

Crowson, A., Pugh, Z., Wilkinson, M., Mayhorn, C.B. (2020). Who is in the room? Notifications for intrusion while in virtual reality. *Proceedings of the Human Factors and Ergonomics Society 64th Annual Meeting*.

Crowson, A., Wilkinson, M., Wagner., R. B., Wilson, R., Gillan, D., (2020). Emotion task analysis: Proposing a tool for the assessment of emotional components in a task. *Proceedings of the Human Factors and Ergonomics Society 64th Annual Meeting*.

Ferrell, T., **Crowson, A.**, Mayhorn, C. B. (2022). How we perceive and trust advice from virtual humans: The influence of voice quality. *Proceedings of the Human Factors and Ergonomics Society 66th Annual Meeting.*

Lawson, P., **Crowson, A**., Mayhorn, C.B. (2018). Baiting the hook: Exploring the interaction of personality and persuasion tactics in email phishing attacks. *Proceedings of the 20th World Congress of the International Ergonomics Association.*

Lawson, P., Pearson, C. J., **Crowson, A**., Mayhorn, C. B. (2020). Email phishing: Role of persuasion principle and personality on identification accuracy. Contribution to signal detection response pattern. *Applied Ergonomics.*

Lawson, P., Zielinska, O., **Crowson, A**., Pearson, C., Mayhorn, C.B. (2017). Phishing susceptibility: using signal detection theory to deconstruct response bias. *Proceedings of the Human Factors and Ergonomics Society 61st Annual Meeting.*

Richardson, K., McLaughlin, A. C., McDonald, M., **Crowson, A.** (2021). The effects of diminished reality on the detection of and response to notifications. *Proceedings of the Human Factors and Ergonomics Society 65th Annual Meeting.*

Wilkinson, M., Pugh, Z., **Crowson, A**., Feng, J. (2019). Manipulating arousal in virtual reality: A feasibility study using slow motion experience. *Proceedings of the Human Factors and Ergonomics Society 63rd Annual Meeting.*

Yuan, J., **Crowson, A**., Richardson G., Feng, J. (2021). Drive aware training: A computerized training program for older drivers' detection of road hazards. *Traffic Injury Prevention.*

Conference Presentations

Altum, J., **Crowson, A**., Sargent, A., Casselman, R. Parental factors, rejection, and emotional dysregulation: a mediation study. *Poster* presentation at the Minnesota Psychological Association meeting, Minneapolis, MN, April 2016.

Crowson, A., Colligan, R., Matteson, E., Davis, J., Crowson, C. Personality traits in patients with rheumatoid arthritis: an unrecognized predictor of mortality. *Poster* presentation delivered at the European League Against Rheumatism. London, UK, June 2016.

Crowson, A., Pugh, Z., Wilkinson, M., Mayhorn, C.B. Who is in the room? Notifications for intrusion while in virtual reality. *Lecture* presentation delivered at the Human Factors and Ergonomics Society meeting, Virtually, October 2020.

Crowson, A., Wilkinson, M., Wagner., R. B., Wilson, R., Gillan, D. Emotion task analysis: Proposing a tool for the assessment of emotional components in a task. *Poster* presentation delivered at the Human Factors and Ergonomics Society meeting, Virtually, October 2020.

Ferrell, T., **Crowson, A.**, Mayhorn, C. B. How we perceive and trust advice from virtual humans: The influence of voice quality. *Poster* presentation delivered at the Human Factors and Ergonomics Society meeting, Atlanta, GA, October 2022.

Lawson, P., Zielinska, O., **Crowson, A.**, Pearson, C., Mayhorn, C.B. Phishing susceptibility: using signal detection theory to deconstruct response bias. *Poster* presentation delivered at the Human Factors and Ergonomic Society meeting, Austin, TX, October 2017.

Richardson, K., McLaughlin, A. C., McDonald, M., **Crowson, A.** The effects of diminished reality on the detection of and response to notifications. *Lecture* presentation delivered at the Human Factors and Ergonomics Society meeting, Baltimore, MD, October 2021.

Sargent, A. **Crowson, A.**, Altum, J. Casselman, R. Parental rejection and emotional dysregulation: examining the roles of self-esteem and insecure adult attachment. *Poster* presentation at the Minnesota Psychological Association meeting, Minneapolis, MN, April 2016.

Wilkinson, M., Pugh, Z., **Crowson, A.**, Feng, J. Manipulating arousal in virtual reality: A feasibility study using slow motion experience. *Poster* presentation delivered at the Human Factors and Ergonomics Society meeting, Seattle, WA, November 2019.

Wilkinson, M., Pugh, Z., **Crowson, A.**, Feng, J., Mayhorn, C.B., Gillan, D. Manipulating arousal in virtual reality. *Poster* presentation delivered at North Carolina Cognition Conference, Raleigh, NC, March 2019.

Awards, Honors, and Affiliations

Graduate Association of Student in Psychology Webmaster
May 2018 - May 2021, Raleigh NC (elected three terms in a row)

Triangle User Experience Professionals Association Member
May 2020 - Present, Raleigh NC

Human Factors and Ergonomics Society Member
August 2019 - Present, Santa Monica CA

Dean's List (3.5 GPA or higher) five semesters
May 2014 - May 2016, Winona MN

Merit-Based $12,000 scholarship from Mayo Clinic
August 2014 - May 2016, Winona MN

Eagle Scout of America
Oct 2012, Rochester MN

Skills

A/B Testing | Card Sorting | Think-Aloud Protocol | Heuristic Evaluation | Wireframes | Quantitative Research | Qualitative Research | UX Research Strategy | UX Research Operations | Statistical Analysis | Data Visualization | SPSS | Excel | Usability Testing Survey Design | Participant Recruiting | Interviewing | Photoshop | STISIM | Qualtrics | Oculus Rift| HTC Vive | Wordpress | Wix

Coursework

Overview of Human Factors | Cognitive Process | Learning and Motivation | Quantitative Methods in Psychology I | Quantitative Methods in Psychology II | Qualitative Research Methods | Seminar in Human Attention | Ethics in Research | Advanced Developmental Psychology | Visual Perception | Seminar in Skill Acquisition and Training | Physiological Psychology | Training Research | Ergonomic Performance Assessment