JAIME SIMONELL

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EDUCATION

Master of Applied Science, University of Toronto, Human Factors Engineering   2020
Dissertation: Cognitive Models and Environmental Interface Designs
Supervisor: Dr. Carine Mendelsson

Bachelor of Science, University of Waterloo, Computer Science   2016

TEACHING INTERESTS

Cognitive Work Analysis, Dynamic Systems Theory, Learning and Mental Models, Human-Computer Interaction, Energy Policies

TEACHING EXPERIENCE

Course Instructor, Interactive Computational Design, University of Toronto, Summer 2020
- Designed curriculum, chose text and prepared course materials for a class of 120 students on the role of computational design, resulted in winning the Course Instructor of the Year in 2020 from the University of Toronto Course Instructor Association
- Developed, and delegated assignment, and exam grading to teacher assistants, providing comprehensive guiding rubrics to ensure marking consistency
- Held office hours and provided weekly online support for classes to ensure student understanding and learning of course materials were met in accordance with department guidelines

Course Instructor, Designing Interfaces, York University, Winter 2020
- Designed curriculum, chose text and prepared course materials for a class of 30 students in a practicum based course to ensure practice-based learning prior to field placement
- Created assignment outlines and rubrics to ensure student learning outcomes aligned to course, and departmental expectations
- Held office hours and provided weekly online support for classes which 86.7% of students noted as being extremely helpful to their learning in a mid-course evaluation

Teaching Assistant, Digital Analysis, University of Toronto, Fall 2019
- Graded assignments and exams to provide tailored feedback based on course expectations and outcomes
- Held tutorials for up to 30 students including creating supporting materials for lectures which was met with positive feedback from students, with 90% of students reporting strongly agreed in the role of the tutorial supporting their learning
- Managed online discussion forum for student queries which had an active daily rate of 30 student posts per day

Introduction to Information Technology, University of Toronto, Winter 2019
- Provided laboratory supervision and instruction for a class of 90 to ensure Environmental Health and Safety guidelines were met
- Developed a test scheme to grade performance of final circuit project, which led to a requested presentation

PROFESSIONAL DEVELOPMENT – INSTRUCTOR TRAINING

- University of Toronto, MIE 3002: Engineering Teaching and Learning Course, 2019
- University of Toronto, Teaching Assistants' Training Program, 2019
- University of Waterloo, Certificate in University Teaching, 2018

RESEARCH EXPERIENCE

Research Assistant

Department of Industrial Engineering, University of Toronto, 2018–2020
- Conducted research in the area of Cognitive Models and Noise Interface Design under the supervision of Dr. C.M.Simon, which led to 2 conference presentations and 1 peer-reviewed publication
- Assessed designs for ecological compatibility with operators to improve output efficacy

Research Assistant

Department of Computer Science, University of Waterloo, 2016–2018
- Conducted research in the area of Visual Perception and Interface Design under the supervision of Dr. V.J. Malcom, which led to 3 conference presentations
- Provided potential designs for review within limited time frames which informed the team's interdisciplinary approach to building prototypes

Research Assistant

Department of Mathematics, University of Waterloo, Summer 2016
- Conducted research on Mathematical models to assess risks under the supervision of Dr. F. M. Kunthalini which was the basis for the literature review for the Projections Model Project in collaboration with the Physics department
- Utilized mathematical models to find the intersection of minimal risks that led to assessing and finding gaps in the literature to inform future studies

PROFESSIONAL EXPERIENCE

Human Factors Engineer, Canada Energy Inc, 2020–present
- Review designs for equipment for nuclear power plants and provide input on human factors designs' sustainability which led to improved energy output of 23%
- Conduct research project for sensory input and operator's performance within a team of four

PUBLICATIONS

Refereed conference papers
- Simonell, J. (2019). "Noise Impact on Ecological Design." *Proceedings of the Human Factors and Ergonomics Society 30th Annual Meeting,* pp. 211–290. Los Angeles, CA: USA.
- Simonell, J., Tippits, S., & Donald, A. (2019). "Human Factors Project." *Proceedings of the 20th Annual Conference of the American Nuclear Society.* Los Angeles, CA: USA.

Non-refereed papers and poster presentations
- The SDK Inventory: A tool for capturing Worker Competencies. 40th Annual Meeting of the Human Factors and Ergonomics Society. September 16–20, 2019. Los Angeles, CA: USA.
- Interface Design. Human Factors Seminar Series. January 1, 2019. Energy Canada, Brampton, Ontario: Canada.

Presentations
User friendly designs. SEEE-ABD 2018 – Professional Workshops, June 3, 2018. Toronto Hilton Hotel, Toronto, Canada (Assisted with professional workshop at SEEE-ABD 2018 with Dr. Frank A. MacAlistair)

ACADEMIC COMMUNITY INVOLVEMENT

Conferences organization and committee work
- Vice-president, Volunteer committee and speaker's bureau of the Ergonomics Society, 2019–2020
- Chair, Cognition and Work Displays session: Engineering and Technical Group, Human Factors and Ergonomics Society 49th Annual Meeting, 2018
- Conference Organizer, 5th Annual Inter-University Session on Human Factors Engineering, University of Toronto, Toronto, Canada, 2018
- Student Chapter President for the Computer Science Union, Department of Computer Science, University of Waterloo, 2015–2016
- Chair, Waterloo Computer-Human Interaction student chapter–Association for Computing Machinery, University of Waterloo, 2014–2015

EDITORIAL AND REVIEWER EXPERIENCE

- Reviewer, Omega: The International Journal of Management Science, Fall 2018
- Reviewer, Conference papers for the Human Factors and Ergonomics Society 49th Annual Meeting, Cognitive Engineering and Decision-Making Technical Group, 2018

AWARDS

- NSERC Postgraduate Scholarship B (PGS-B and PGS-A) Research Award, 2019
- Glyim Williams Scholarship (for academic achievement). Department of Mechanical & Industrial Engineering, University of Toronto, 2018–2019
- Mary H. Beatty Fellowship: Entrance scholarship. School of Graduate Studies, University of Toronto, 2018
- Graduating Class Academic Award (top 10%), University of Waterloo, 2016

PROFESSIONAL MEMBERSHIPS

- Association of Canadian Ergonomics, 2018–present
- Human Factors and Ergonomics Society, 2018–present
- Institute of Electrical and Electronics Engineers, 2016–present
- Association for Computing Machinery, 2014–2016

LANGUAGES

- Fluently bilingual in English and French
- Certificate of bilingualism – French and English, University of Waterloo, June 2016