Davide Gentile

Toronto, Canada | gentiledv@gmail.com | +1 416-302-2124

SUMMARY

- Human Factors professional with 8+ years of experience designing systems to support user performance and safety in high-stakes industries such as nuclear, process control, and telecommunications.
- Proficient in quantitative and qualitative methodologies, specializing in function/task analyses and evaluation of human-system interfaces, including computerized displays and control panels.
- Proven track record of collaborating across engineering disciplines, mentoring junior teams, and translating complex insights for diverse stakeholders.

PROFESSIONAL EXPERIENCE

Human Factors Team Lead, Experimentation and Analysis

University of Toronto | Toronto, ON | Sep 2024 - Present

- Leading a research program focused on human performance in operation of small modular reactors, conducting experiments, and preparing technical reports and reviews.
- Supervising, coordinating and reviewing the work of junior researchers and engineers, including technical specifications for overview displays and drawings for control panels to support simultaneous monitoring of 4 small modular reactor units.
- Helping manage a \$360K research budget, coordinating academic and industry collaborations across North America and Europe.
- Interfacing with vendors, regulators and researchers in technical conferences and meetings with the Natural Science and Engineering Council of Canada, the Canadian Nuclear Safety Commission, and the OECD-NEA Human-Technology-Organization Program.

Human Factors Researcher

University of Toronto | Toronto, ON | Sep 2019 - Aug 2024

- Designed and developed computerized displays and human-system interfaces for human-subjects experiments studying the impact of machine learning explanations on operator performance.
- Performed and documented human factors analyses, including function and task analyses, to support human-system performance in automated decision assistance.
- Trained and mentored 400+ students in statistics, R programming, and human factors engineering.

Data Science Consultant

Armilla AI | Toronto, ON | Jan 2024 - Jun 2024

- Developed evaluation frameworks to improve user interaction and trust in large language models.
- Led risk assessments and usability testing to ensure compliance with global safety standards.
- Partnered with clients to align research insights with business and product development goals.

Human Factors Intern

Ericsson, Global Al Accelerator | Montreal, QC | Oct 2020 - Sep 2023

- Supported data scientists in integrating human factors into design modifications and new projects.
- Conducted UX research, usability testing, and behavioral experiments to improve machine learning model interpretability.
- Collaborated cross-functionally with product, research, and engineering teams to integrate human factors insights into machine learning solutions.

EDUCATION

PhD, Human Factors Engineering, University of Toronto (2019 – 2024) MSc, Cognitive Science of Language, McMaster University (2017 – 2019) BA, Lettere Moderne, University of Bologna (2014 – 2017)

TECHNICAL SKILLS

Human factors analysis, Function and task analysis, Human-system interface design, Usability testing, Risk assessment, Control panel design, Cognitive engineering, Verification and validation (V&V), Regulatory compliance, Data analysis (e.g., R, Python), Project management, Cross-disciplinary collaboration, Team leadership.

Updated: February 2025