

**Andrew Marble** Toronto, ON | andrewmarble@gmail.com | (613) 875-3304

## **PROFESSIONAL SUMMARY**

Experienced technology leader with a track record building and advising services and software businesses. Deep research focused background with expertise in identifying and mitigating AI risks and evaluating AI systems in accordance with Responsible AI practices. Proven ability to provide technical and strategic leadership and deliver complex projects for diverse industries.

Willing to travel as required.

## **PROFESSIONAL EXPERIENCE**

### **Consultant, Artificial Intelligence Underwriting Company, San Francisco, CA | May 2025 – Present**

- Worked with the founding team of a startup (funded by a \$15M round from Nat Freidman) from stealth through early stage
- Built tooling to conduct evaluation of AI systems (chatbots, image generation, agents, etc.) according to a developed standard, and conducted assessments for clients
  - o Identified techniques in the literature for provoking and measuring harmful or unwanted behavior in AI systems
  - o Built LLM based tooling to employ the identified techniques to test client systems
  - o Configured test harnesses to interrogate client systems
  - o Analyzed results and wrote reports of findings
- Advised on scope and nature of evaluations
- Conducted original research into improved evals

### **Director, AI Risk | Armilla AI (YC Insurtech Startup), Toronto, ON | Feb 2024 – Jan 2025**

- Built an offering and tooling for third party assessment of AI risks, including assessment objectives, process, and platform. Incorporated responsible AI leading practices and standards including NIST AI RMF, ISO 42001, etc.
- Led a team to deliver customer engagements conducting comprehensive risk advisory, red teaming and performance, security, and bias evaluations of generative and predictive AI systems, including assessing compliance with relevant legislation
- Engaged in sales activities, including discovery and proposal development
- Published thought leadership to demonstrate our assessment capabilities
- Collaborated with underwriting team to integrate assessment results into risk transfer offerings

### **Owner / Consultant | Willows AI, Montreal, QC | Feb 2021 - Feb 2024**

- Founded and led a research consulting firm specializing in AI solutions for manufacturing and aerospace industries
- Advised clients on the applicability of recent AI research to their business problems
- Project managed delivery of engagements, including internal technical project management and client management
- Authored and presented reports and presentations to business stakeholders

- Managed a team of employees and additional contractors on various projects
- Led internal research and development including developing a foundation model for manufacturing inspection, leading to a peer reviewed publication
- Implemented a RAG system for an aerospace manufacturer using local LLMs

**Applied AI Research Scientist | Element AI (Acquired by ServiceNow), Montreal, QC | Oct 2018 - Feb 2021**

- Led technical teams in proposing and delivering AI consulting projects for enterprise clients
- Worked with sales to scope technical projects and lead discovery
- Specialized in uncertainty quantification and explainability in computer vision models
- Developed and implemented deep learning models using PyTorch
- Translated complex technical concepts into actionable insights for clients
- Conducted data exploration and developed machine learning models for various industries

**Management Consultant | KPMG, Toronto & Ottawa, ON | 2014 - 2018**

- Executed data-driven performance evaluations and mandate reviews of government and large crown corporations
- Led the data stream of a nationwide assessment of equipment maintenance practices for the Department of National Defence
- Analyzed large operational and financial datasets to identify performance improvement opportunities
- Developed strategies for optimizing resource utilization in complex organizational environments
- Presented findings to executive audiences

**Assistant Professor | Carleton University, Ottawa, ON | 2008 - 2014**

- Taught undergraduate courses in systems and computer engineering
- Led a research program, conducting research, applying for funding, and supervising researchers
- Awarded tenure in 2011

**EDUCATION**

MBA | Queen's University, Kingston, ON | 2013 - 2014

Ph.D., Electrical Engineering | University of New Brunswick, Fredericton, NB | 2003 - 2007

B.Sc., Electrical Engineering | University of New Brunswick, Fredericton, NB | 1999 - 2003