Artificial Intelligence (AI) is transforming our fundamental way of life across every sector of the economy. With broad multi-disciplinary expertise delivered by our researchers across six faculties, and with generous support from our industrial partners and the government, Waterloo.AI is building tomorrow’s intelligent systems to drive social and economic prosperity.
Building Tomorrow’s Intelligent Systems Today

Since launching in 2018, Waterloo.AI’s multi-disciplinary research teams have been collaborating with industry to develop intelligent systems in areas such as disease detection and treatment, understanding language and emotion, and vehicle navigation.

Our projects are building tomorrow’s intelligent systems today, by translating industry requirements into deployable, real-time embedded AI. In years to come, we expect this investment to yield profound dividends for the economic prosperity and quality of life of people all around the world. And we are just getting started.

$5.3M Total partner research funds + matching grants

$750K AI for Social Good funding to date

$1M UW initial seed funding over 5 years

200+ Affiliated faculty members and research scientists

45+ Applied AI research projects ongoing for companies and AI for Social Good program

19 Corporate partners from 14 different industries

375+ Graduate and 4th year undergraduate students attended the 2020 Partner Job Fair

100+ Masters and PhD students supported

18 Technical events and academic conferences and workshops supported

9 Partner workshop events with over 300 attendees

184
Corporate partners from 14 different industries

45+
Applied AI research projects ongoing for companies and AI for Social Good program

19
Corporate partners from 14 different industries

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100+
Masters and PhD students supported

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Technical events and academic conferences and workshops supported

9
Partner workshop events with over 300 attendees
What Makes Us Unique?

Our strength is operational AI, wherein we bring an applied research approach with data and subject matter expertise to help our partners solve their real-world challenges and opportunities for growth. Research projects fall into two categories:

**AI FOR INDUSTRY**
Partnering with small, medium, and large sized enterprises and corporations to tackle specific technology problems via operational AI research.

**AI FOR SOCIAL GOOD**
Partnering with for-profit, non-profit and public sector companies to tackle complex issues with broad ranging societal implications.

**OPERATIONAL AI**
Leveraging the underlying science, operational research collaborates with industry to apply AI to specific problems and opportunities. We aim to develop lightweight, compact AI with minimal computing power and energy requirements, suitable for a host of stand-alone applications.

**FOUNDATIONAL AI**
Foundational research allows us to identify – and subsequently overcome – shortcomings in existing artificial intelligence (AI) approaches. This not only strengthens the scientific base of the field but is also critical to further advancing real-world AI applications.

**SCALABLE** – Usable for start-ups to multinationals
**TRANSPARENT** – “Black Box” safety-critical systems can be certified
**DEPENDABLE** – Performance regardless of connectivity
**ACCESSIBLE** – Doesn’t require Ph.D. level HQP
**SECURE** – Private data protected locally but metadata shared by cloud users
**COMPACT** – Deployable with limited cost, energy, and bandwidth

**MACHINE LEARNING, STATISTICAL LEARNING, AND DATA MINING**
**PROBABILISTIC MODELS, KNOWLEDGE DISCOVERY, AND KNOWLEDGE REPRESENTATION**
**INTELLIGENT AGENTS AND GAME THEORY**
**OPTIMIZATION AND DECISION MAKING**
**DATA SCIENCE AND ANALYTICS**
**AFFECTIONAL COMPUTING AND SENTIMENT ANALYSIS**
**HUMAN-MACHINE INTERACTION**
Partner with Us

A partnership with Waterloo.AI offers a number of critical benefits for companies looking to augment their innovation pipeline and best prepare themselves for an AI-enabled future.

**SPONSORED OPERATIONAL (APPLIED) RESEARCH**
As Waterloo.AI’s core strength is operational research, we start by focusing on your business problems that have the potential to be solved by AI.

**AI TRAINING AND EDUCATION**
Waterloo.AI aims to provide practicing professionals with the opportunity to deepen their technical skills in AI through intensive short courses with top instructors in the field.

**NETWORKING WITH PEERS AND WATERLOO.AI RESEARCHERS**
Waterloo.AI hosts an annual partners meeting to discuss and promote the various research activates that are ongoing across our partners and researchers.

**ACCESS TO TALENT**
Many of our partner companies are seeking out top talent for their evolving need for expertise in AI technologies. We offer a number of ways for our partners to interact with our graduate students, from working shoulder to shoulder over the course of research projects to hosting private networking events.

**CORPORATE BRANDING**
Each partner will have their company logo on our website at their respective partnership level. We can also support you in additional company marketing efforts around your partnership with Waterloo.AI, including joint press releases, promotional videos, and press interviews.

Contact Us

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