

Application

- ❑ **Rule-based** machine learning to gather business insights in support of high-level business decision making (regression- and tree- based algorithms)
 - ✓ Credit scoring and risk prediction
 - ✓ Market segmentation and customer retention/uplift modeling
- ❑ **Data-driven** machine learning to efficientize low-level business process (NN-based algorithm)
 - ✓ AI fashion model
 - ✓ Massive online targeted advertising
 - ✓ Front line customer services (e.g., AI powered chatbot)
- ❑ **Automation** to optimize business operation and production
 - ✓ Autonomous vehicles for transportation and logistics
 - ✓ Industrial robotics for production, warehouse management, and so on (e.g., automation in meat processing)

Philosophy

- ❑ Business benefits from AI technologies primarily because we are in *the third AI wave*
 - ✓ Human behavior is the driving force of all business activities (the key lesson we learn from the COVID-19 pandemic)
 - ✓ Human behavior generates BIG behavioral data and the big data can be processed by high-performance computers to better understand human behavior
- ❑ It is not really about *Artificial* Intelligence, it is about *Collective* Intelligence
 - ✓ Business performance is improved by combing human intelligence and machine intelligence together
 - ✓ Optimizing collaboration between human and machine
- ❑ Roles of AI in business
 - ✓ Tool (e.g., automatic spelling)
 - ✓ Assistant (e.g., cruise control)
 - ✓ Peer (e.g., AI for fraud detection)
 - ✓ Manager (e.g., smart city)

