

# Artificial Intelligence Roadmap

Legend (Text Font): Done Ongoing Not yet Available

## OVERALL STRATEGIES

### Facilities and Services

- AI Data centers with HPC in selected HEIs
- HPC Consortium/ AI Infrastructure Network

### Human Resources

- Establish partnerships with international universities that have strong foundations on AI, and provide support for at least 100 students to pursue studies for Masters and/or PhD degree in artificial intelligence in these universities
- Embedded/ladderized program for AI for non-STEM undergraduates
- AI **upskilling course** for **non-STEM** graduates focusing on applications to their specific industry
- Implement conversion programs for graduates from courses highly related to AI such as mathematics and computer science for at least 500 graduates

### R&D Technologies

- Provide platform for open data sharing and infrastructure for AI – Robotics R&D
- Mission-driven AI R&D programs

### S&T Policies

- Launch programs to formulate AI policies, laws and standards
- Provision of support for the implementation of the National AI Roadmap

## R&D SOLUTIONS

340 M

- Capability building on AI through training and acquisition of HPCs
- Mobile-Web Bidirectional Neural Machine Translation System for Filipino and Cebuano
- Enhancing Man-Machine Interaction through Intelligent Conversational Agents
- SpaceBetweenUs: A Computer Vision Application for Physical Distancing Monitoring in Public Areas

200 M

- Robotics AI for autonomous missions
- AI for DRR and Infrastructure
- Generative Adversarial Networks Applications
- RNN and CNN
- Speech, Image and Video Recognition

300 M

- Recommender systems
- Financial securities recommendations.
- Intelligent Applications
- Image and Video Recognition
- Situation interpretation through heterogeneous sensors

400M

- Reinforcement learning Supervised, Unsupervised Learning
- Cognitive Computing

400 M

- Cognitive Computing – advanced intelligent applications such as virtual assistants and smart robots
- Artificial General Intelligence

400 M

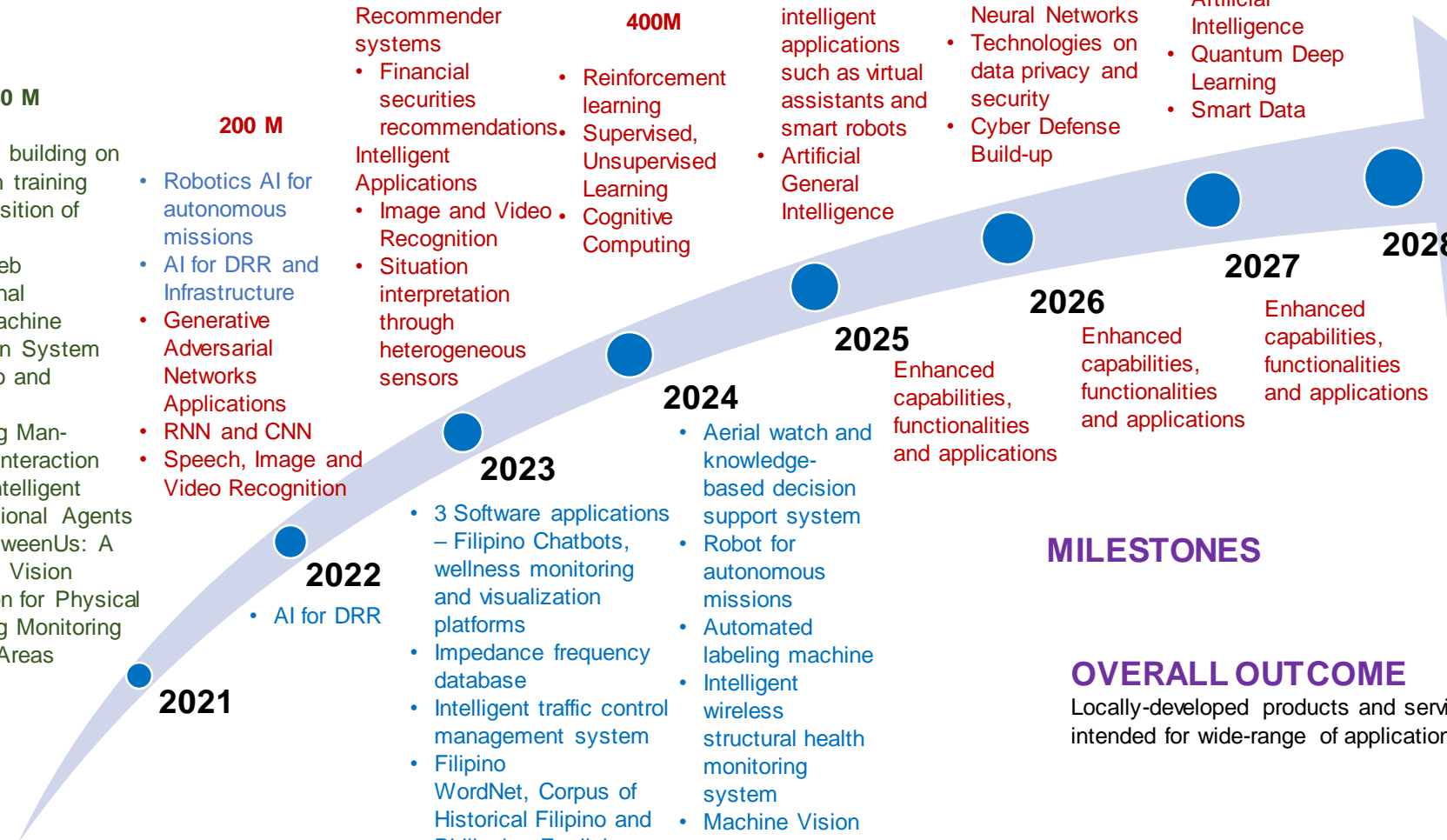
- Artificial Narrow Intelligence
- Creative Machines
- Diffractive Neural Networks
- Technologies on data privacy and security
- Cyber Defense Build-up

500 M

- Artificial Super Intelligence
- Simulation Engines
- Swarm Artificial Intelligence
- Quantum Deep Learning
- Smart Data

## VISION

- Universal and affordable access to AI infrastructure
- Upskilling of Workforce
- Science-based solutions for socio-economic opportunities
- Unprecedented innovation for the industry sector
- Policies and stakeholder engagement



2021

2022

2023

2024

2025

2026

2027

2028

## MILESTONES

Enhanced capabilities, functionalities and applications

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## OVERALL OUTCOME

Locally-developed products and services intended for wide-range of applications