

FUTURE OF CONSTRUCTION

Intelligent Construction System
to enable building automation and shelter for adverse weather condition

Concrete Finishing Robot
for trowelling, levelling & screeding

One operator to many robots

3D Precast Module

Intelligent Concrete Pump
to integrate with the intelligent construction system

Rebar Tying Robot
for slab rebar tying

Automatic Formwork Installation/Dismantling Robot with Lifting System

Robotic Placement of Rebars

Construction Floor

Autonomous Tower Crane

Autonomous Construction Elevator
for communication with self-navigating robots

Skimming & Painting Robot

Autonomous Material Transporter

Indoor

Ceiling

One operator to many robots

Curtain Wall/Cladding Installation Robot
for building facade finishing

Drilling & Anchoring Robot

Floor Marking Robot

Tiling Robot

Automated Off-Site Manufacturing

Automated Robotic Shuttering

Concrete Spreader Machine

Automated Storage and Retrieval System

Autonomous Excavator

3D Printer

Bolt & Nut Installation Robot
for structural steel construction

Robot Middleware Framework
for human-to-robot and robot-to-robot collaboration

Video Surveillance & Remote-Supervision

Centralized R&A Control Room

Digital Twin of The Site
a virtual representation of site condition for better project management

Robot Dog & Drone
for safety inspection/remote-supervision

Autonomous Road Compactor

Road Marking Robot