## smartAGV

- agvSub:ros::Subscriber
- agvPub:ros::Publisher
- agvServer:ros::ServiceServer
- action: Action
- nodeHandler:ros::NodeHandle
- + initialize(ros::NodeHandle &):void
- + agvCallBack(const
- std\_msgs::String::ConstPtr&):void
- + agvService(
- agvbot::agvService::Request &,
- agvbot::agvService::Response &):bool



## Action

- action:int
- nodeHandle: ros::NodeHandle
- naviCtrl : Navigation
- + intialization(ros::NodeHandle &): void
- + execute(int, const std::string &
- args):void
- + navigate(int, const std::string & args):void

## Navigation

- movebaseCmdVelPub: ros::Publisher
- odomSub : ros::Subscriber
- time : ros::Timer
- current\_pos : geometry\_msgs::Pose
- direction : intangle : int
- start\_angle : int
- mbClient:
- actionlib::SimpleActionClient<move\_base\_msgs::MoveBaseAction>
- movebaseCmdVelPub:ros::Publisher
- + initialize(ros::NodeHandler &):void
- + goTo(geometry\_msg::Pose):void
- + abortMove(void):void
- + forward(void):void
- + back(void):void
- + left(void):void
- + right(void):void
- + stop(void):void
- odomCallBack(const nav\_msgs::Odometry::ConstPtr &):void
- movebaseCallback(
- const actionlib::SimpleClientGoalState&,
- const move\_base\_msgs::MoveBaseResult::ConstPtr&
- ):void
- void timerCallback(const ros::TimerEvent &)
- double convert2degree(double)