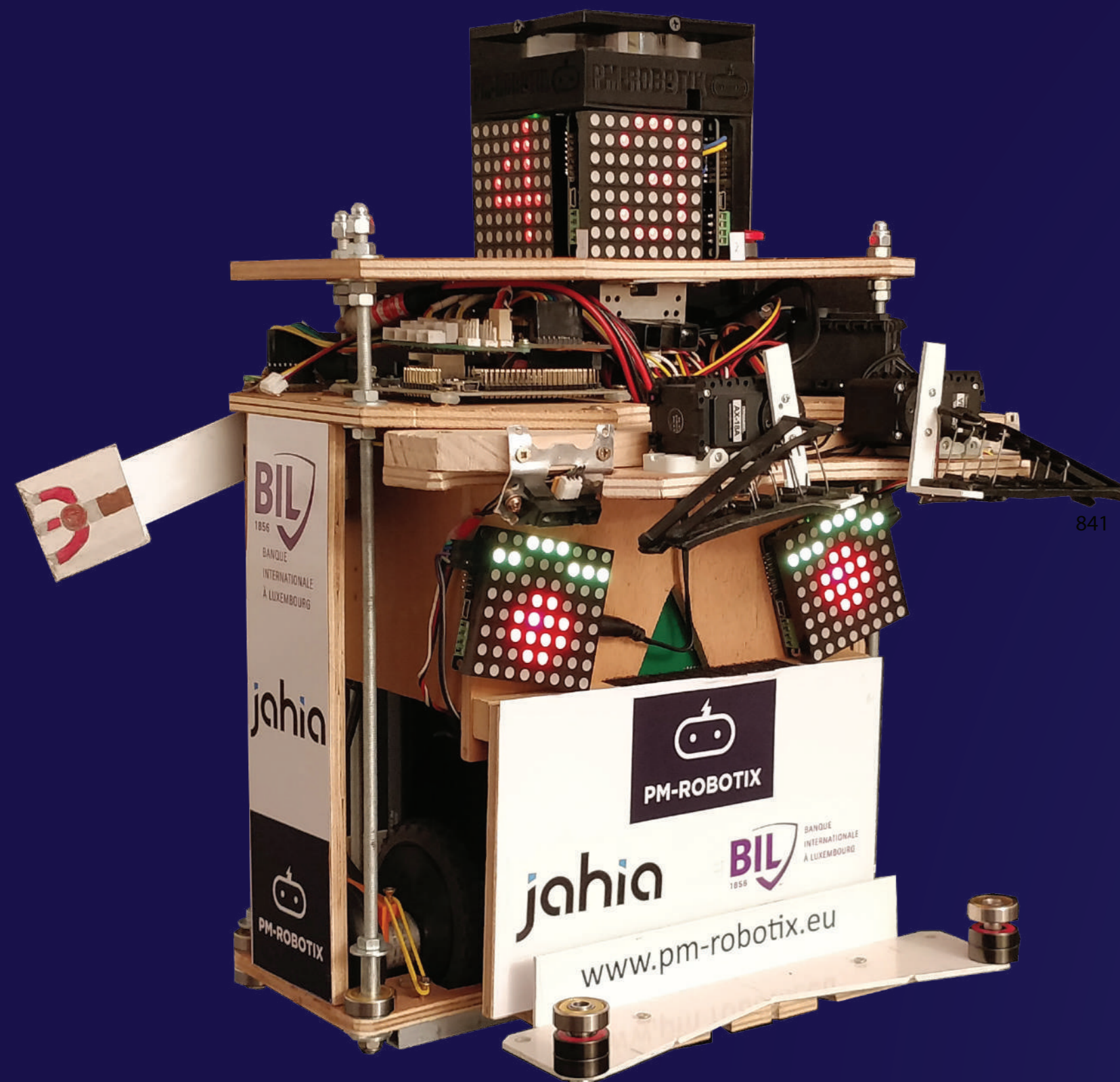


## MAIN ROBOT



[www.armadeus.com](http://www.armadeus.com)

- ARM Cortex-A7 @ 528MHz
- Raspberry Pi like with same connector
- Linux 4.17.4 compiled with PREEMPT-RT
- Wifi 5Ghz usb key / USB

### Detection Beacon

using a laser Class 1 and a simple Arduino + SHARP GP2

### Motion System by I2c

MD25+EMG30  
Collaboration with EsialRobotik team

### Arms and eyebrows

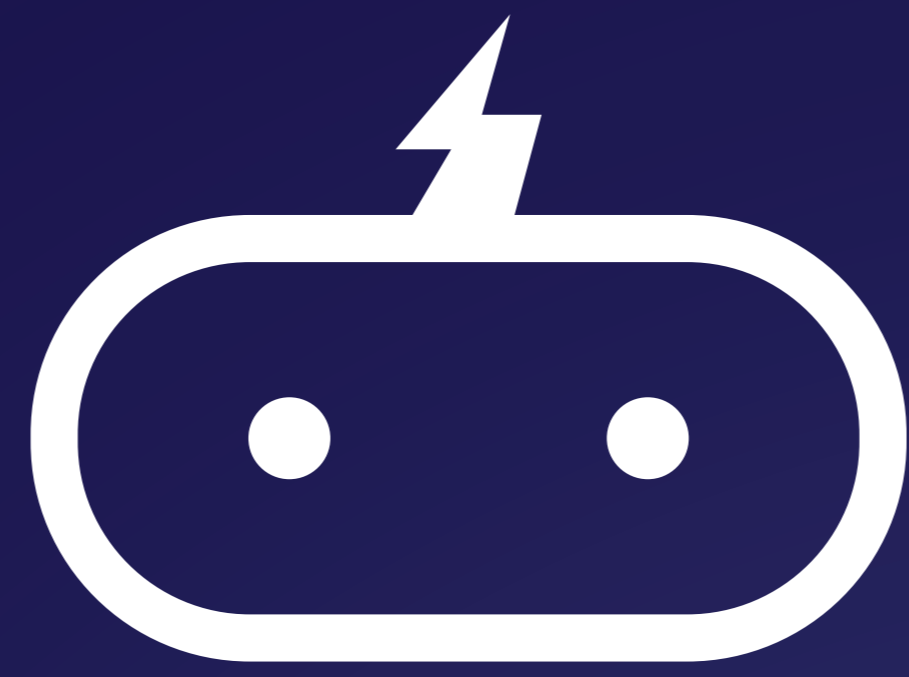
Servomotors AX-12  
Using a PIC uC

### Electronic cards

via « RS Design Spark »

### Alimentation

lead batteries and car boosters



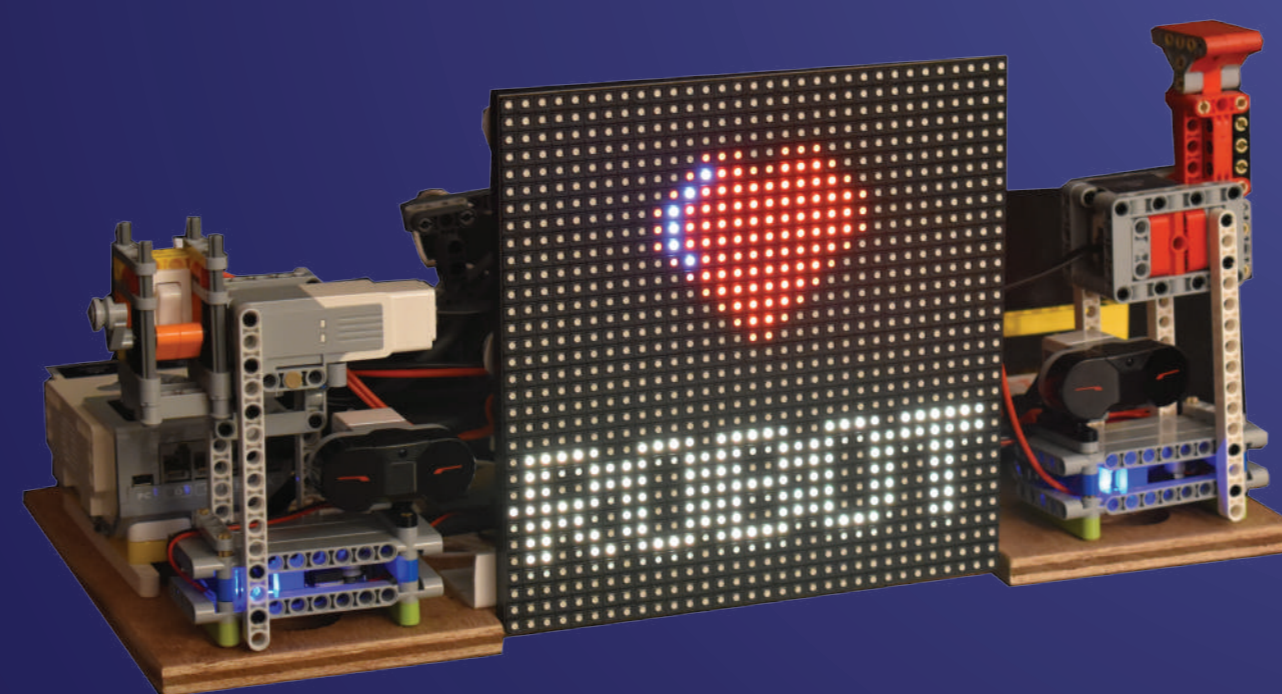
# PM-ROBOTIX

[www.pm-robotix.eu](http://www.pm-robotix.eu)



Christophe CHAUDELET,  
Christophe DEBAUCHE  
Adélaïde & Marianne DEBAUCHE,  
Inna KOSINSKA

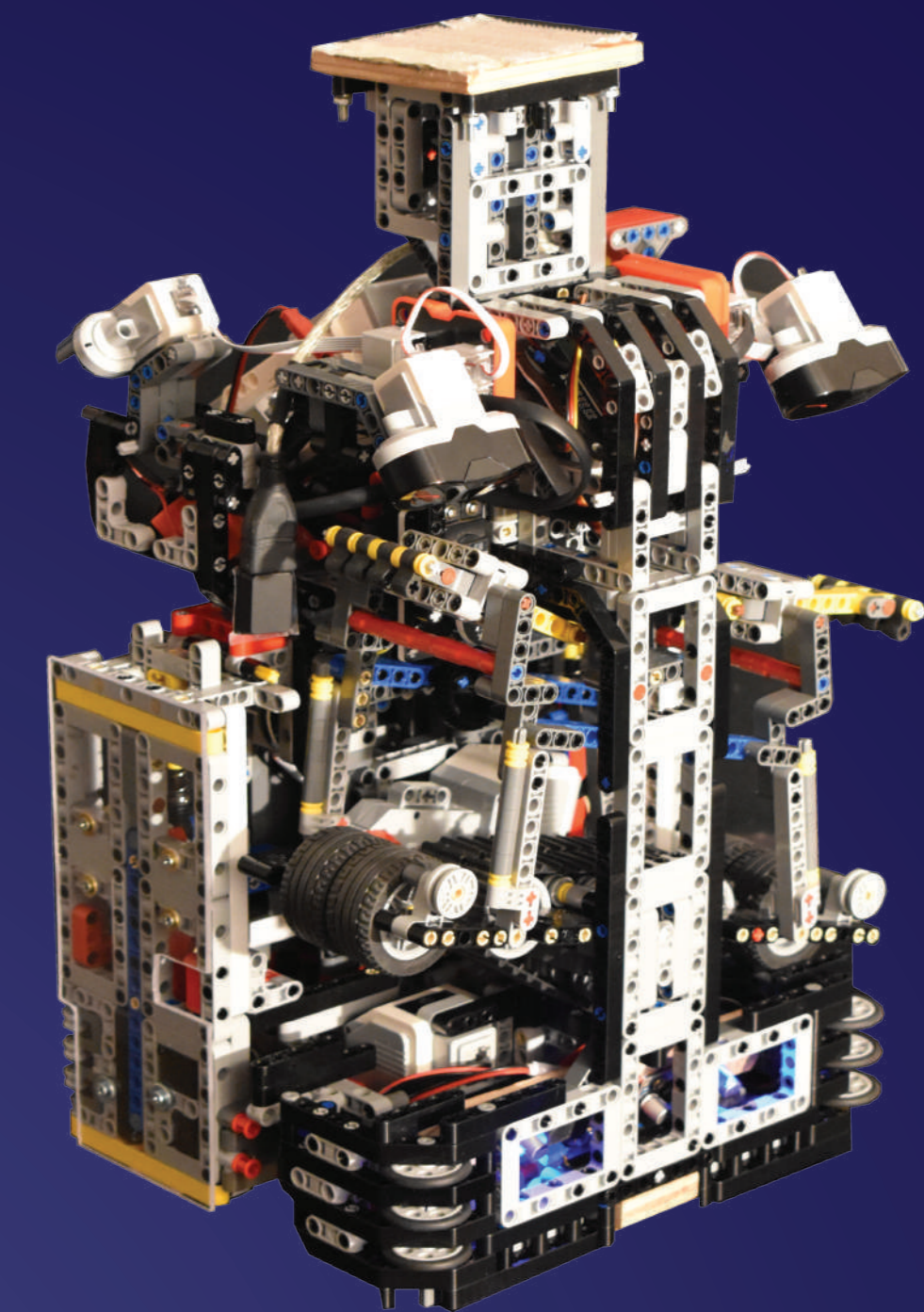
## ATOM EXPERIENCE



## ONE COMMON PROGRAM WRITTEN IN C/C++

- Motion system, speed and position
- Trajectory path calculation
- IA - State diagram + decision maker

## SECONDARY ROBOT



## Lego MindStorm EV3 and [www.ev3dev.org](http://www.ev3dev.org)

- ev3dev is a Debian Linux-based operating system that runs on LEGO® MINDSTORMS EV3 and Raspberry Pi-powered BrickPi
- SDcard linux debian custom
- Communication by Wifi 5GHz / USB

### Alimentation EV3 and Servos car boosters and DC/DC

### Components

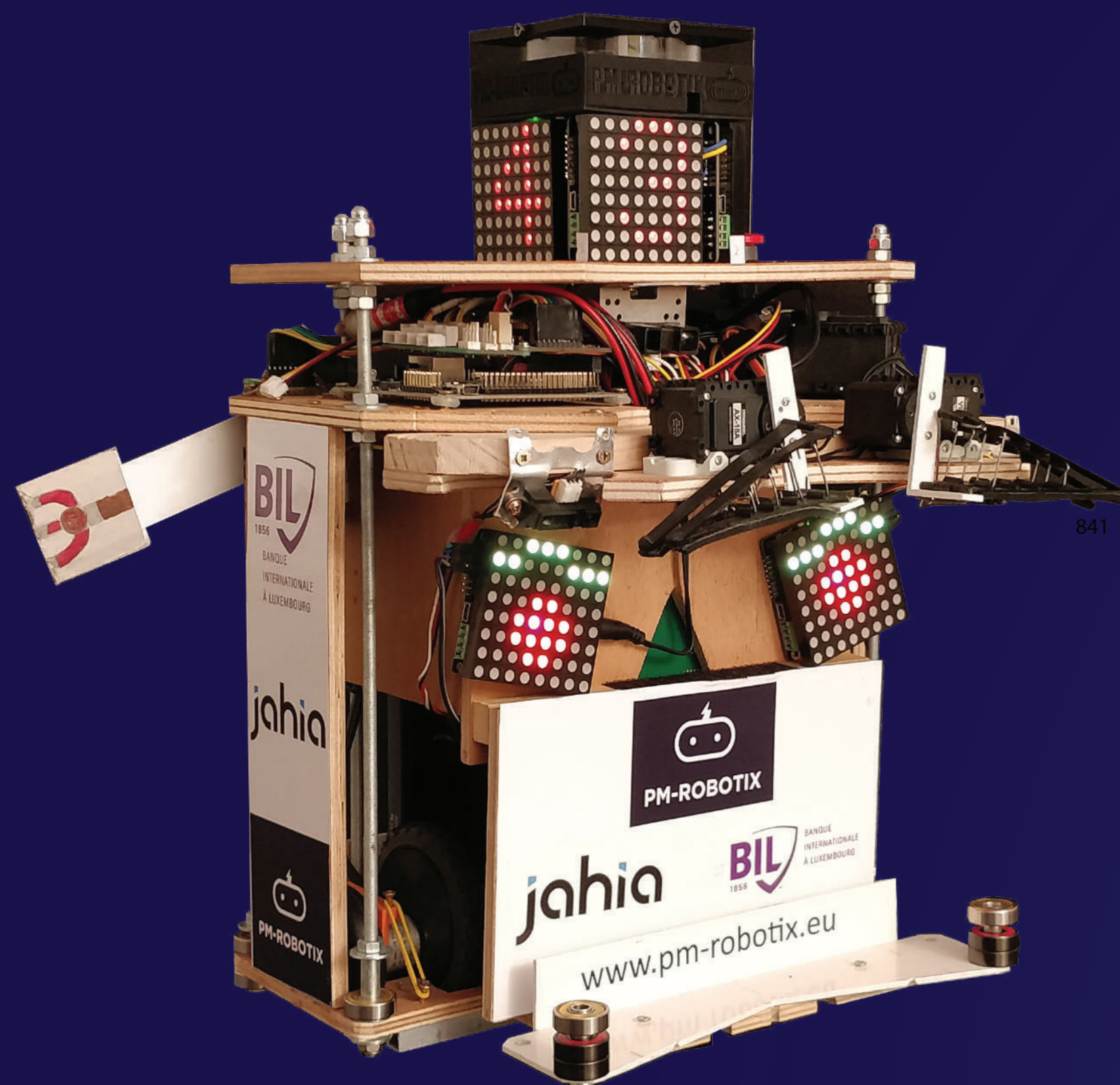
- (3) EV3 Lego Motors
- (4) EV3 IR Sensors
- (2) HiTechnic NXT Angle Sensor (as encoders)
- (1) Mindsensors.com 8-channel Servo Controller
- (3) Standard Servomotors
- (2) EV3 Sensor Multiplexer
- (2) Port Splitter for NXT Digital Sensors



BANQUE  
INTERNATIONALE  
À LUXEMBOURG



# ROBOT PRINCIPAL



## www.armadeus.com

- ARM Cortex-A7 @ 528MHz
- Meme connecteur que Raspberry
- Linux 4.17.4 compilé avec PREEMPT-RT
- Wifi 5Ghz / USB

### Balise de détection

On utilise un laser class 1 et une simple Arduino + SHARP GP2

### Asservissement par I2c

MD25+EMG30  
Collaboration avec la team EsialRobotik

### Bras et sourcils

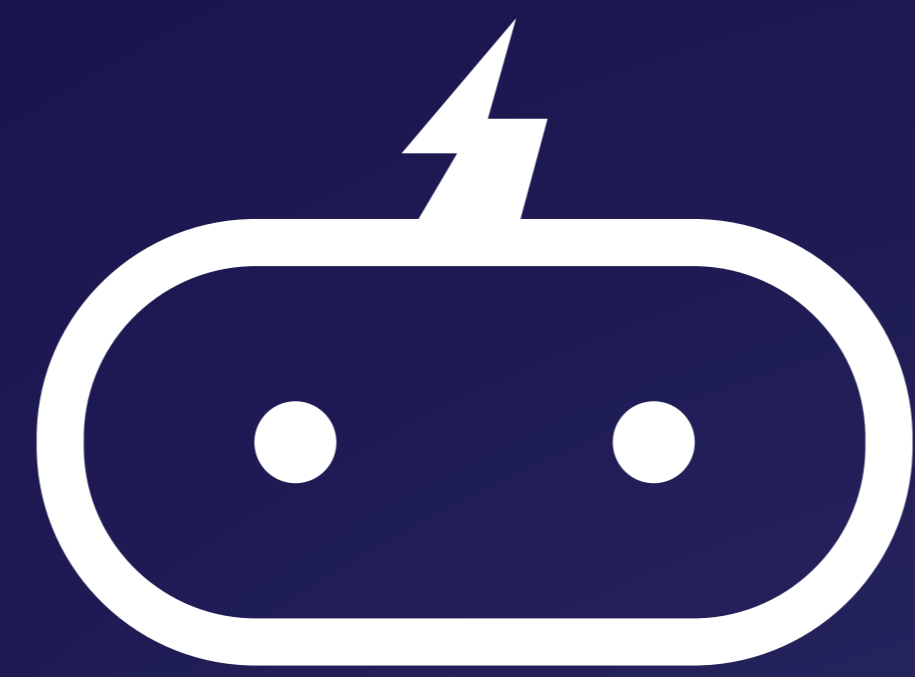
Servomotors AX-12 (utilisant un PIC)

### Cartes Electroniques via

« RS Design Spark »

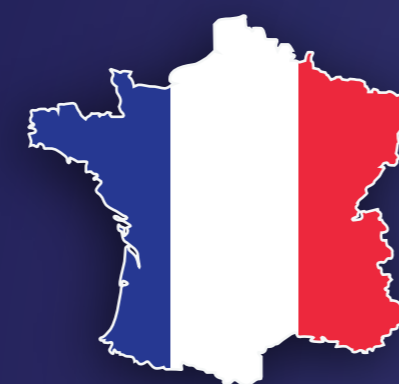
### Alimentation

batteries au plomb et boosters de voiture



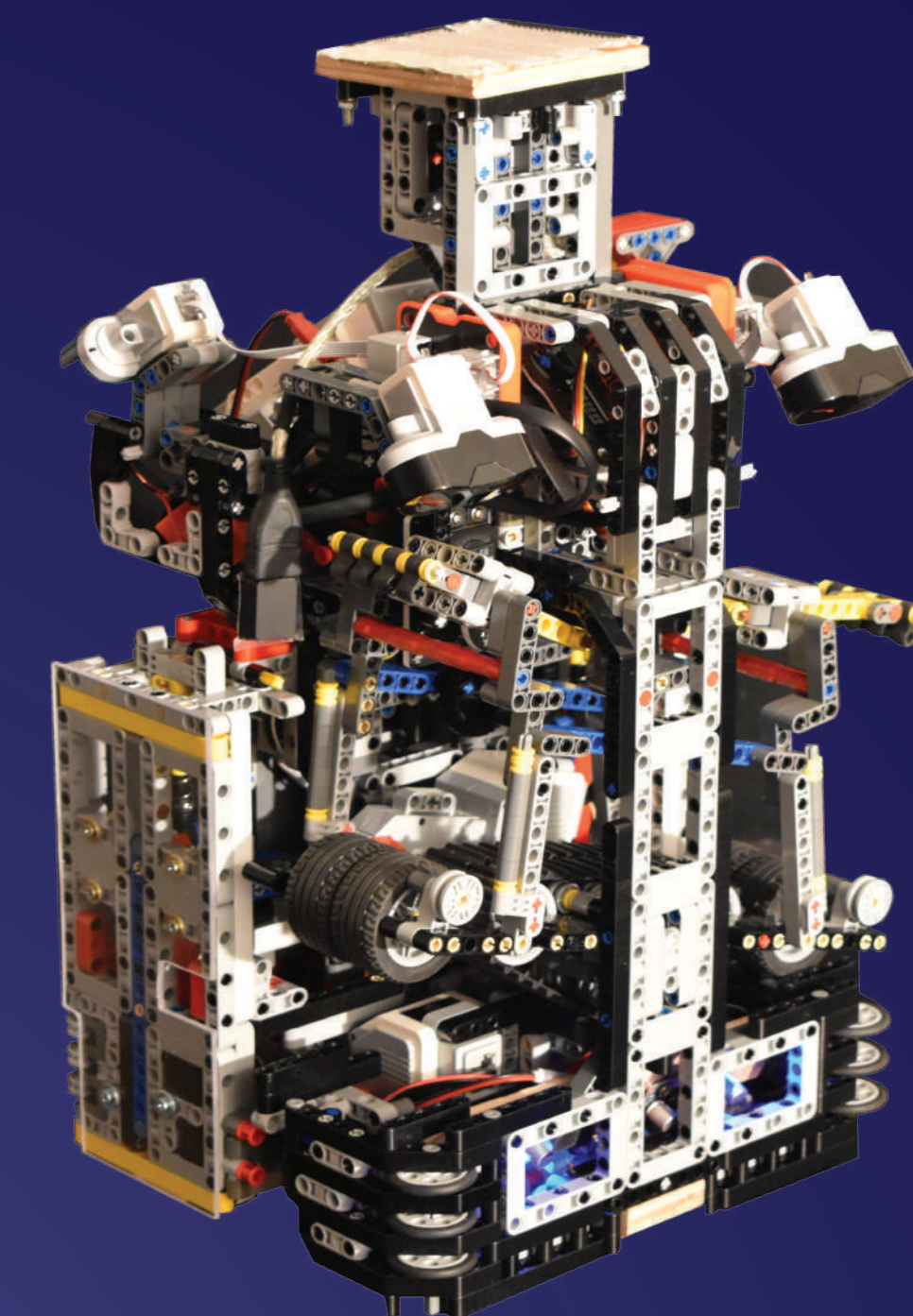
# PM-ROBOTIX

www.pm-robotix.eu



Christophe CHAUDELET,  
Christophe DEBAUCHE  
Adélaïde & Marianne DEBAUCHE,  
Inna KOSINSKA

# ROBOT SECONDAIRE



## Lego MindStorm EV3 and www.ev3dev.org

- Ev3dev est un système basé sur linux pour EV3 LEGO MINDSTORMS
- Une simple carte SD suffit pour l'utiliser
- Communication par Wifi 5GHz / USB

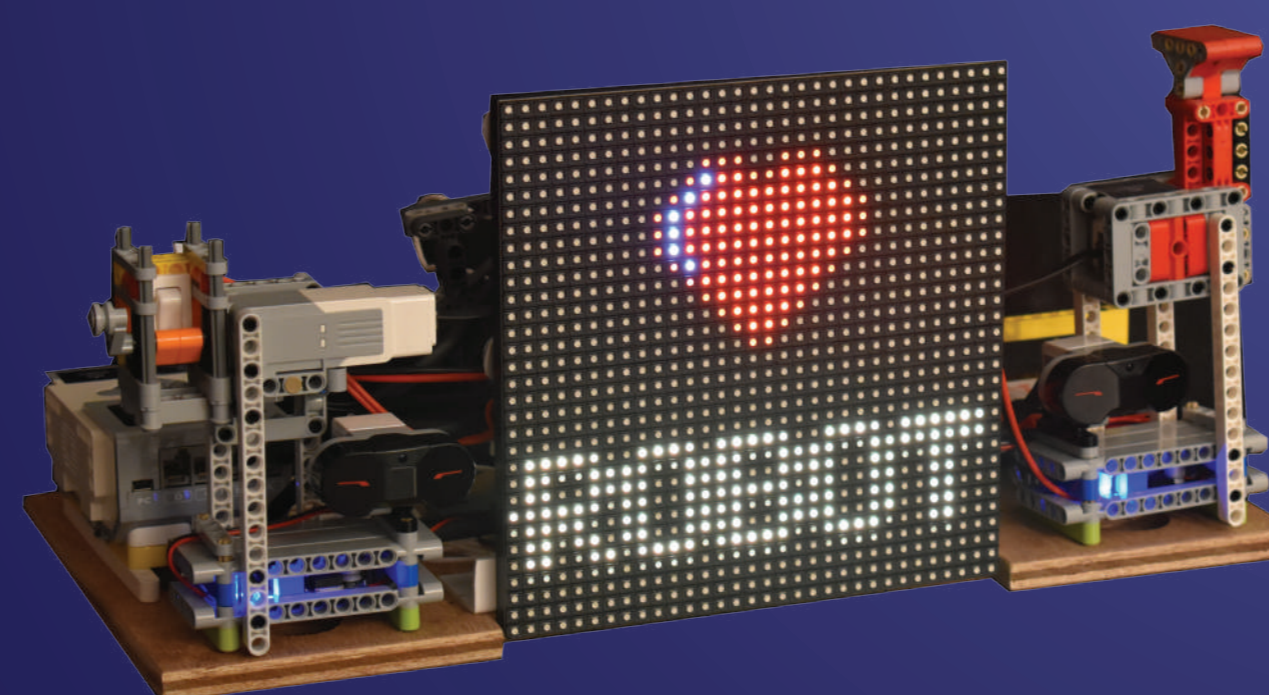
### Alimentation

EV3 et Servos boosters de voiture 12V et DC/DC

### Liste des composants

- (3) EV3 Lego Motors
- (4) EV3 IR Sensors
- (2) HiTechnic NXT Angle Sensor (as encoders)
- (1) Mindsensors.com 8-channel Servo Controller
- (3) Standard Servomotors
- (2) EV3 Sensor Multiplexer
- (2) Port Splitter for NXT Digital Sensors

## ATOM EXPERIENCE



## Un seul programme commun en C/C++

- Asservissement en vitesse et position
- Calculs de chemin et de trajectoire
- IA – diagramme d'état + prise de décision



BANQUE INTERNATIONALE À LUXEMBOURG

