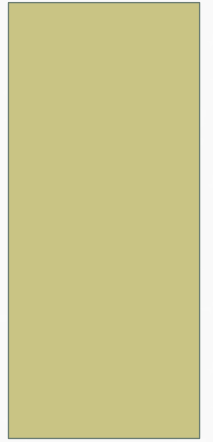



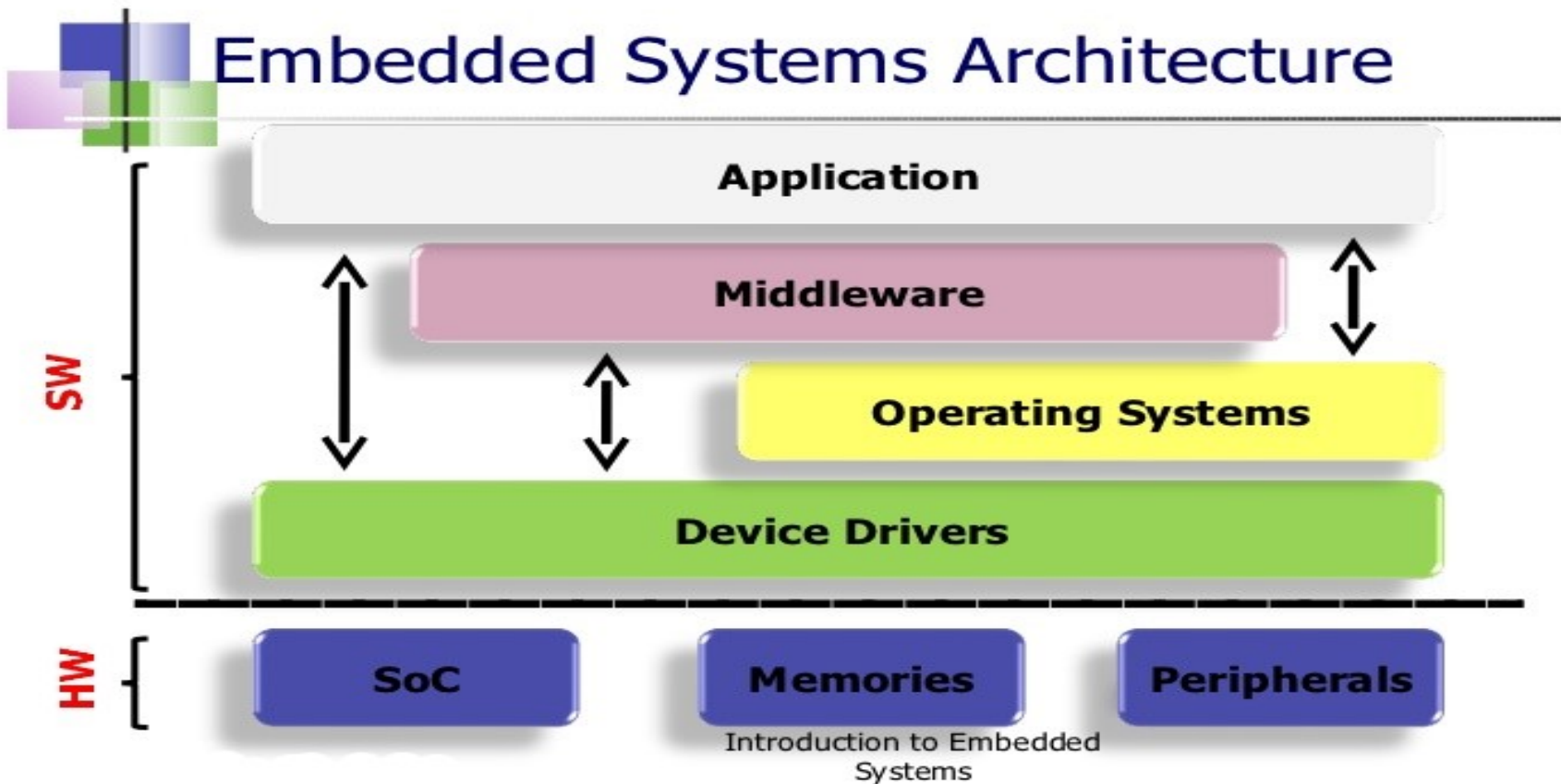
INTRODUCTION TO EMBEDDED SYSTEMS



WHAT IS AN EMBEDDED SYSTEMS ?

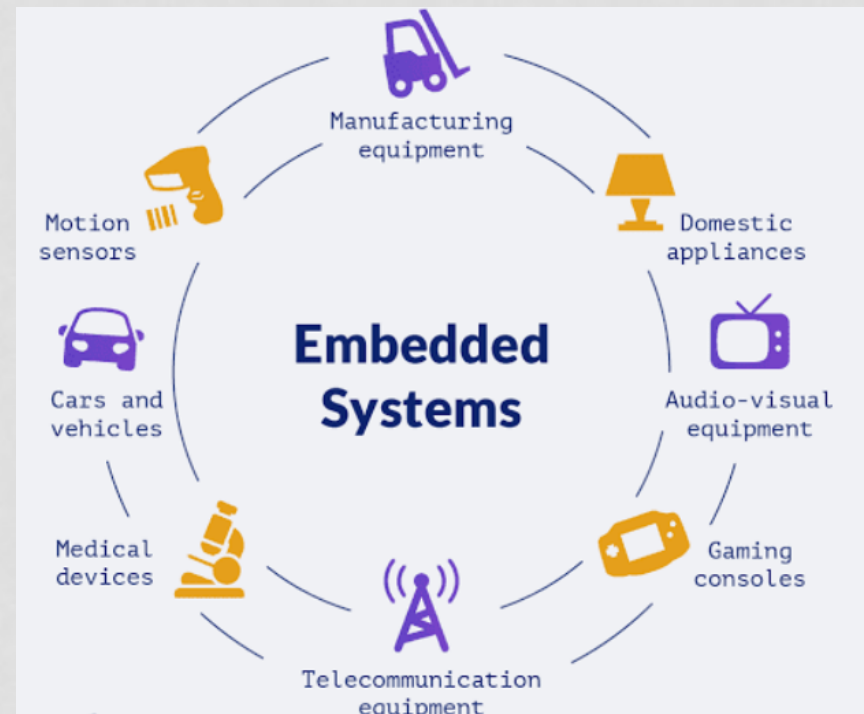
- Embedded means something that is attached to another thing. An embedded system can be thought of as a computer hardware system having software embedded in it.
- An embedded system is a special-purpose computer system designed to perform certain dedicated functions. It is usually embedded as part of a complete device including hardware and mechanical parts

ARCHITECTURE OF EMBEDDED SYSTEMS



APPLICATIONS OF EMBEDDED SYSTEMS

- Industrial control / Automation / Monitoring
- Medical & Healthcare
- Transportation, Automotive & Railways
- Defense & Aerospace



TYPES OF EMBEDDED SYSTEMS

Types of Embedded systems

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graph TD; A[Types of Embedded systems] --> B[Based on performance and functional requirements]; A --> C[Based on performance of Microcontroller]; B --> D[Real time]; B --> E[Networked]; B --> F[Mobile]; B --> G[Stand alone]; C --> H[Small scale]; C --> I[Medium scale]; C --> J[Sophisticated];
```

Based on performance and functional requirements

Real time

Networked

Mobile

Stand alone

Based on performance of Microcontroller

Small scale

Medium scale

Sophisticated

FUTURE OF EMBEDDED SYSTEMS

- Internet Of Things
- Ubiquitous Computing
- Cyber Physical Systems
- Context Aware Devices
- Organic Computing
- Automotive Contextual Reconfiguration
- Intelligent Devices

COURSES OFFERED IN RCAT

- Embedded Full Stack IIOT Analyst
(6 Months, 1200Hrs)
- Basic Embedded Full Stack IIOT Analyst
(3 Months, 600Hrs)
- Advance Embedded Full stack IIOT Analyst
(3 Months, 600Hrs)
- Industrial Embedded IoT Internship
(1 Month, 200Hrs)

THANK YOU !!