Meet the Robots
engage • experience • inspire

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Informatics Forum, University of Edinburgh
10 Crichton St, Newington,
Edinburgh EH8 9AB

Statistical Machine Learning
and Motor Control
(SLMC) Group
INTRODUCTION OF OUR TEAM

Sethu Vijayakumar

Serena Lambley

Namiko Saito

Russell Buchanan

Wenqian Du

Marina Aoyama

Atoosa Kasirzadeh

Ran Long

Thomas Corberes
I'm Talos, the walking scientist! I can do research in Artificial Intelligence, Human-Robot Interaction, and Navigation. Who knows what discoveries I'll make!

I'm built to lift heavy objects and perform advanced manipulation tasks. With my advanced technology, I can even communicate with other robots and devices via network.

**TALOS Technical Features**
- **Dynamic**: 32 degrees of freedom
- **Powerful**: 6 kg payload per arm
- **Intuitive**: Torque-controlled joints
- **Adaptable**: Customizable head and gripper
- **Efficient**: 1.5h walking/3h stand-by battery
- **Safe**: Safe interaction with environment

Saeid Samadi

Jiayi Wang
Exo-H3: Future of Assistive Technology

My name is EXO-H3, and I am here to support you. I can help you stand up and I can help you sit down. I can help you take a step and when you no longer need me, I can walk away.

I am a lightweight robot, and I have a soft cushion to make you comfortable. I will not hurt you. I can even get taller or shorter. You can put me on at any time, and we can go for a walk. To infinity and beyond.

Exo-Skeleton Technical Features

- **Joints**: 6 actuated degrees of freedom (hips, knees and ankles)
- **Power**: 40Nm per joint; Max user’s weight: 100kg
- **Weight**: 17kg with the battery
- **Dimensions**: User’s height 110-210cm
- **Safe**: Safe interaction with humans

Andreas Christou
Ruaridh Williams
Sandor Felber
EVA: The Nextage Companion for the Smart Factory of the Future

I am EVA, a Nextage robot on a mobile base, ready to move to the smart factory of the future and work alongside my human friends.

I'm good for moving around and moving objects with my two arms. I also have two big eyes to look carefully at everything I do!

EVA Technical Features

- **Dynamics**: 18 degrees of freedom
- **Vision**: 2 cameras in stereo pair
- **Precision**: position-controlled joints
- **Payload**: 1.5 Kg per arm
- **Sensing**: measures interaction forces at the tips of the arms

João Moura
Juan Ferrandis
Dual-Arm Robot with Haptic Device: The Ultimate Precision Machine

Unleash your inner robot and explore remote environments by experiencing the power of Human-Robot Cooperation and discover the power of Tele-operation.

I can offer you unparalleled precision and dexterity with this cutting-edge technology while ensuring a safe work environment.

Dual-Arm Technical Features

**Robot-arm:**
- **Dynamic:** 7 joints per arm
- **Intuitive:** Torque-controlled joints
- **Safe:** Safe interaction environment
- **Powerful:** 3 kg per arm

**Haptic device:**
- **Dynamic:** 6 joints per device

Keyhan Kouhkilou
Mohammad Kasaei
Sphero is a unique robot in the shape of a ball.

It is an ‘Edutainment’ robot - used for teaching kids to code as well as create new kinds of interactive games that can be programmed from scratch.

Race the Maze!

Use an iPad interface to control your Sphero and race against an opponent to cross the maze first.

Good Luck!

Sphero Technical Features

• Many Programmable Sensors
  compass, light sensor, gyroscope, accelerometer, motor encoders.
• Infrared Communication
• Inductive Charging
• Rich Programming Interface
Use python or Scratch to program.

Deepti Vijayakumar
AI and Robot Ethics Q&A

Join us for an exciting Q&A session with Professor Vijayakumar and Dr. Kasirzadeh, where we will discuss emerging issues related to AI and Robotics. They will be available for the last 10 minutes of each session to answer questions and engage with the audience in a lively discussion.

Location: Seminar Room