



Scientific Meeting Program



Organization
Escola de Engenharia, Universidade do Minho

8:30-9:00 Reception

9:00-9:15 Opening session

9:15-10:15 Invited talk

People Vs Robots in Space: Cooperation or Competition?

Invited speaker: *Dr. Claude Nicollier*

European Space Agency (ESA) Astronaut

Session I

10:20-10:40

SISTEMA DE LOCALIZAÇÃO UTILIZANDO ULTRA-SONS

José M. N. Vieira, Sérgio I. Lopes, Carlos A. C. Bastos, Pedro N. Fonseca
Dep. Electrónica e Telecomunicações da Universidade de Aveiro / IEETA

10:40-11:00

AUTOMATIC PARALLEL PARKING OF CAR-LIKE ROBOTS

Mário Florêncio, Pedro Agostinho, João Silva Sequeira
Instituto de Sistemas e Robótica / Instituto Superior Técnico

11:00-11:20

Coffee-break

Session II

11:20-11:40

COORDINATED TRANSPORTATION OF A LARGE OBJECT BY A TEAM OF TWO ROBOTS

Rui Soares, Estela Bicho
Esc. Sup. Tec. e Gestão de Felgueiras - Instituto Politecnico do Porto
Departamento Electrónica Industrial, Universidade do Minho

11:40-12:00

SELF-LOCALIZATION BASED ON KALMAN FILTER AND MONTE CARLO FUSION OF CAMERA AND VISUAL INFORMATION

David Cabecinhas, João Nascimento, João Ferreira, Paulo Rosa, Pedro Lima
Instituto de Sistemas e Robótica / Instituto Superior Técnico

12:00-12:20

ROBOT BEHAVIOR COORDINATION BASED ON FUZZY DECISION-MAKING

Nelson Ramos, Pedro U. Lima, João M.C. Sousa
Instituto de Sistemas e Robótica, Dept. Engenharia Mecânica, GCAR/IDMEC
Instituto Superior Técnico

12:20-12:40

REAL-TIME VISION SYSTEM

Hugo Silva, J. M. Almeida, L. Lima, A. Martins, E. P. Silva, A. Patacho.
Instituto Superior de Engenharia do Porto

12:40-13:00

VISION-BASED PEDESTRIAN DETECTION USING HAAR-LIKE FEATURES

Gonçalo Monteiro, Paulo Peixoto, Urbano Nunes
Instituto de Sistemas e Robótica / Universidade de Coimbra

13:00-14:30

Lunch

14:30-15:30 Invited talk

Honda Humanoid Robotics: A Bright Future for ASIMO

Invited speaker: *Dr. Frank Joublin*

Principal Scientist

Honda Research Institut Europe GmbH, Germany

Session III

15:30-15:50

A SERVICE ROBOT FOR SAMPLES TRANSPORTATION AND DELIVERY

Andre Moreira, Mafalda Antunes, Estela Bicho, Paulo Ventura

Departamento Electrónica Industrial, Universidade do Minho

Infineon Technologies, Vila do Conde

15:50-16:10

AGENT PLATFORM FOR ROBOT CONTROL IN REAL-TIME DYNAMIC ENVIRONMENTS

Nuno Sousa, Eugénio Oliveira

Faculdade de Engenharia da Universidade do Porto

16:10-16:30

MULTI-UAV INTEGRATION FOR COORDINATED MISSIONS

Pedro Almeida, Ricardo Bencatel, Gil Gonçalves, João Sousa

Faculdade de Engenharia da Universidade do Porto

16:30-16:50

Coffee-break

Session IV

16:50-17:10

PARAMETER MEASUREMENT FOR SPEED AND TORQUE CONTROL OF RC SERVO MOTOR A SMALL-SIZE HUMANOID ROBOT

Milton Ruas, Filipe Silva, Vítor Santos

Dep. Electrónica e Telecomunicações, Dep. Engenharia Mecânica

Universidade de Aveiro

17:10-17:30

ROAZ AUTONOMOUS SURFACE VEHICLE DESIGN AND IMPLEMENTATION

Hugo Ferreira, A. Martins, A. Dias, C. Almeida, J. M. Almeida, E. P. Silva

Instituto Superior de Engenharia do Porto

17:30-17:50

COMMUNICATION CHALLENGES RAISED BY OPEN CO-OPERATIVE TEAMS IN ROBOTICS

Luís Mota, Luís Paulo Reis, Hans-Dieter Burkhard

DCTI-Instituto Superior de Ciências do Trabalho e da Empresa, Faculdade de Engenharia da Universidade do Porto, Institut für Informatik, Humboldt Universität Berlin

17:50-18:10

REAL-TIME FRAMEWORK FOR GESTURE IMITATION IN HUMANOID ROBOTS

Ricardo Marranita, Manuel Lopes, Alexandre Bernardino, José Santos-Victor

Instituto de Sistemas e Robótica / Instituto Superior Técnico

18:10-18:15 Closure