

# Videos Robotics 2

[http://www.diag.uniroma1.it/deluca/rob2\\_en.html](http://www.diag.uniroma1.it/deluca/rob2_en.html)

This is the list of videos that accompany the slides shown during the course.

Groups of videos pertaining to the same set of slides are zipped in a single archive (sometimes multiple), with approx zip size. The code in the archive name is the same as in the associated slides.

All videos should be viewable using QuickTime Player, VLC Media Player, or Windows Media Player (with the needed codecs).

A label is put to videos presenting research work or educational activities performed by members of the DIAG Robotics Laboratory (or the former DIS LabRob), and to those developed within European research projects with their participation.

Research videos of the Robotics group at DIAG are available also on the YouTube channel RoboticsLabSapienza <https://www.youtube.com/user/RoboticsLabSapienza>.

*Version: February 28, 2024*

#Archive: how many? (zip size)	List of videos (ordered as they appear in the block of slides)
#00: 16 videos (210.9MB)  + 6 videos no longer shown	ABB_laser_cutting_robot.mp4 Atlas, What's new.mp4 WAM Learning and Game Play — Barrett Technology.mp4 I-RIM_2022_IterativeLearningSoftRobot.mp4 – video DIAG I-RIM_2020_UniPadova_FeedbackLinearizationControl.mp3 UR_on_curved_surface.mov ICRA12_SNS_final.mp4 – video DIAG/Stanford HQP_escande_ijrr12_trim.mov ICRA14_Data_acquisition.mov – video DIAG ICRA14_Torque_validation_experiment.avi – video DIAG LWR4_VREP.avi – video DIAG lwr_vibration_Xvid.mov impedance_control_DivX.mov SurfaceFollowing.mov PegInsertion-InsertionStrategy.mov video_ICRA15.mp4 – video DIAG <b>NO LONGER SHOWN (in a subfolder)</b> VSA-Cube_Arm With High and Low Stiffness Preset.mov UNIPI_CubeBot_Composition.mp4 UNIPI_humanoids12_VSA_CubeBot_peg_in_hole.mov Strategy3_60_Degree_per_Second.mpg – video PHRIENDS sami_face_trim.mov IROS13_2022_VS_i.mp4 – video DIAG
#01: 3 videos (21.6MB)	Measuring the absolute accuracy of an ABB IRB 1600 industrial robot_trim.mov Calibration_RobotCamera.mp4 Calibration_3DL_FANUC_edited.mp4

#02_1: 7 videos (121.5MB)	justinCarryATray.avi – <a href="#">video PHRIENDS</a> Dual-Arm Redundancy.mpg MPIK_KR500_onRail_trim2.mov SelfMotion_Dexter.mov – <a href="#">video DIAG</a> OttNakamura_SelfMotionCompliant.mp4 RandomMP_6R.mpeg – <a href="#">video DIAG</a> CoHRoS – Cooperative Programming for Highly Redundant Robot Systems.mp4 (*) Pseudoinverse_Human.mp4 – <a href="#">video DIAG</a>
#02_2: 9 videos (106.7MB)	UR10_linear_task_RAL2019_trimmed.mp4 – <a href="#">video DIAG</a> RA-L_19_Stable_Torque_Optimization_trimmed.mov – <a href="#">video DIAG</a> 2R_max_manip_high.mp4 – <a href="#">video DIAG</a> AutomaticaFair08_dancing_Alin.avi IROS15_RP_Constraints_trim.mov – <a href="#">video DIAG</a> 2009-icra-video.mp4 TRO_SNS.mp4 – <a href="#">video DIAG</a> IROS12_0397_VI_i.mp4 – <a href="#">video DIAG/Stanford</a> Video_Generalized_SNS.mp4 – <a href="#">video DIAG (**)</a>
#05: 6 videos (30.2MB)	Quanser_Linear_Flexible.mov Manutec_PTP_MinTime.mpg Manutec_PTP_MinEnergy.mpg ICRA14_Data_acquisition.mov – <a href="#">video DIAG</a> HB2_Video_Ch6_Gautier_KukaLWR_DynIdentification_NoLoad.mp4 IROS17_Payload_Estimation.mp4 – <a href="#">video DIAG</a>
#07: 8 videos (26.6M)	OhneRegler.avi SoftArm_Visualbased_Avoidance_Flacco.mpg TwoRobotCooperation_Orocos_withhuman.mp4 VGL_Bahn_Schwarz.avi SAPHARI_imitation_learning.avi – <a href="#">video SAPHARI</a> Robust Visual Servo Control Using the Reflexxes Motion Libraries.mp4 Collision Avoidance Using the Reflexxes Motion Libraries.mp4 – <a href="#">video DIAG/Stanford</a> Robotiq_Gripper_LWR_Collaboration_trimmed.mov
#09: 2 videos (3MB)	RestToRest_OneLink.mpg – <a href="#">video DIAG</a> 15e_FlexArm_NonlinearRegulation.avi – <a href="#">video DIAG</a>
#10: 2 videos (12.8MB)	CoRL19.mov – <a href="#">video DIAG</a> video_ral.mov – <a href="#">video DIAG</a>
#14: 5 videos (60.8MB)	KUKA Robotics at Engineering Company Sematek_trimmed.mov FluidJetVideo_trim1.mov 3D laser polishing_trim.mov DLRRobotler_DoorOpen.mpg Visual Force Feedback.mpg
#15: 3 videos (44.8MB)	Impedance Control Demo with a 7-DOF Robot Arm_TUKaiserlautern.mp4 (*) Manipulator Performance Constraints for Human-Robot Cooperation_ICRA16.mp4 UNIROMA1_Exp_SingleForceEstimationControl_preIROS14.mp4 – <a href="#">video DIAG</a>
#16: 4 videos (52MB)	DIS_HybridControl_91_first.mp4 – <a href="#">video DIAG</a> DIS_HybridControl_91_second.mp4 – <a href="#">video DIAG</a> DIS_Identification_HybridControl_92.mp4 – <a href="#">video DIAG</a> Force-Motion Control.mp4 (***)

<p>#17: 23 videos (165.6MB)</p>	<p>cereal.mpg Cycab.wmv Sorv.avi coeur_battant.avi final_red.mp4 MovingPlate2.avi ParkDynFeedLin.mpg – video DIAG 2006-dionnet-APFR-AV3D-monocular.mpg IBVS_video_pi1.avi PBVS_Chaumette.mp4 IBVS_Chaumette.mp4 IBVS_momenti_Camb_Malis.mpeg IBVS_straightlines_Chaumette.mp4 IBVS_3RPG.avi – video DIAG Robotica06_2RTS.avi – video DIAG ICRA08_VisServoing_Magellan.mp4 – video DIAG IBVS_Chaumette_s.mp4 IBVS_Chaumette_sdes.mp4 DepthObserver_webots.avi – video DIAG IBVS+Obs_Siena_final.avi – video DIAG depth_estimation.mp4 (1.5M) – video DIAG constant depth experiment.mp4 (65.1M) – video DIAG IROS11_0116_VI_fi.mp4 (3.7M) – video DIAG/Fraunhofer IOSB</p>
<p>#18: 1 video (0.3MB)</p>	<p>Swing_Nonlineare.mpg – video DIAG</p>

(\*) = This video was split in 3 clips on the same slide (it contains also additional material)

(\*\*) = This video was split in 3 clips on three successive slides

(\*\*\*) = This video was split in 4 clips on the same slide (it contains also additional material)

**THE FOLLOWING VIDEOS COVER MATERIALS THAT WERE PART OF THE PROGRAM OF ROBOTICS 2 UP TO 2020-21**

<p>#19: 14 videos (42MB)</p>	<p>ABBCollision Detection.mp4 impact_dummy_str0_20.mp4 – video PHRIENDS impact_dummy_str2_20.mp4 – video PHRIENDS impact_baloon_str4_90.mp4 – video PHRIENDS Strategy4_60_Degree_per_Second.mpg – video PHRIENDS Strategy3_60_Degree_per_Second.mpg – video PHRIENDS Strategy3_90_Degree_per_Second.mpg – video PHRIENDS ICRA08_1037_VI_i.mpg – video PHRIENDS Video_IROS08.mpg – video DIAG IROS17_1900_VI_i.mp4 – video DIAG ICRA13_collisiondetection.mp4 – video DIAG ICRA13_distinguish_manualguidance.mp4 – video DIAG ICRA13_pushpull.mp4 – video DIAG ICRA13_compliant.mp4 – video DIAG</p>
<p>#20a: 13 videos (°) (267MB)</p>	<p>Robot Safety 1989 NIOSH.mp4 ABB Robotics-Safe human robot interaction-SafeMove.mp4 ABB_SafeMove2_demo_Nov2016.mp4 IROS13_2022_VS_i.mp4 – video DIAG TUM.mp4 CollisionAvoidanceConfigurationSpace.mp4 repulsiveTest2good.mp4 – video DIAG/Stanford repulsiveTestgood.mp4 – video DIAG/Stanford BIOROB12_final.mp4 – video DIAG JINT_DepthSpace.mp4 – video DIAG RAL-ICRA16_DualView_ProblemsSolved.mov – video DIAG video_primopiano_NOT_STZ_100.mp4 – video SYMPLEXITY</p>

	schermo_primopiano_NOT_STZ_100.mp4 - video SYMPLEXITY
#20b: 30 videos (559.7MB)	Magrini_inter2.mp4 - video DIAG video_rcim_gesture_only.mp4 - video SYMPLEXITY TA1.mp4 - video DIAG lastVideo.mp4 - video DIAG IROS13_avoidance_trimmed_notitle.mov - video DIAG IROS13_collaboration_trimmed2.mov - video DIAG rgb_depth.mp4 - video DIAG UNIROMA1_IROS14_ECFVFS.wmv - video DIAG Validation#1.mp4 - video DIAG Validation#2.mp4 - video DIAG CollisionVsCooperation_short.mov - video DIAG trailer_last_3073_rgb.mp4 - video DIAG trailer_last_3073_depth.mp4 - video DIAG trailer_last_3073_plot.mp4 - video DIAG imp_natural.mov - video DIAG imp_desired.mov - video DIAG force_drift.mov - video DIAG force_natural.mov - video DIAG IROS16_linear.mp4 - video DIAG IROS16_circ.mp4 - video DIAG ForceControl.mp4 - video DIAG HybridForceVelocityControl.mp4 - video DIAG UR10_CWS_Measuring.mp4 - video SYMPLEXITY UR10_ManualPolishing.mp4 - video SYMPLEXITY UR10_Coexistence_2.mp4 - video SYMPLEXITY UR10_Airlock_Coordination.mp4 - video SYMPLEXITY demoUR10.mp4 - video DIAG VideoMechatronics.mp4 - video DIAG VideoICRA2019_Part1.mp4 - video DIAG VideoICRA2019_Part2.mp4 - video DIAG

(°) = The first three video clips (in one slide) are not included, being copied from block #19