

# Matrox Imaging Agenda



## Matrox Design Assistant Training Spring 2019

Wednesday, April 03, 2019

Time	Topic
8:30 – 8:50	User set-up and Continental Breakfast
8:50 – 9:00	Welcome
9:00 – 10:00	Design Assistant Overview
10:00 – 10:15	<b>Break</b>
10:15 – 10:45	Lab 1 (Getting familiar with DA)
10:45 – 11:15	Blob Tool
11:15 – 11:30	Lab 2 (Shape)
11:30 – 12:00	Grabbing, View Utility & Portal Page
12:00 – 13:00	<b>Lunch</b>
13:00 – 13:30	1D-2D Barcode Reading
13:30 – 14:00	Lab 3A (Label)
14:00 – 14:30	Sure Dot OCR
14:30 – 14:45	<b>Break</b>
14:45 – 15:15	Lab 4 (Sure Dot OCR)
15:15 – 15:45	Locating Objects
15:45 – 16:00	Lab 5 (Model Finder)
16:00 – 16:30	Lab 6 (Image Processing Example)
16:30 – 17:00	Creating an Operator View (HMI)
17:00 – 17:30	Lab 3B (Operator View)

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Thursday, April 04, 2019

Time	Topic
9:00 – 10:00	Measuring
10:00 – 11:00	Labs 7A (Measure Stripe) & 7B (Measure Circle)
11:00 – 11:15	<b>Break</b>
11:15 – 11:30	Pass or Fail? – Tuning & Validation
11:30 – 12:00	Project Change Validator
12:00 – 13:00	<b>Lunch</b>
13:00 – 13:45	Introduction to QuickComm and PLC
13:45 – 14:15	Lab 8 (Runtime Model Definition Example)
14:15 – 14:30	Fixturing
14:30 – 15:00	Lab 7C (Measure Multiple Stripes)
15:00 – 15:15	<b>Break</b>
15:15 – 15:45	Image Acquisition
15:45 – 16:15	Recipes
16:15 – 16:30	Work with Template of Choice (CodeReader or Presence Absence)
16:30 – 17:00	Image Processing: Filters, Mappings, Geometric Transforms
16:30 – 17:00	Lab 9 (Rotating Object)
17:00 – 17:15	Lab 3B (Operator View)

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## Matrox Design Assistant Training Spring 2019

Friday, April 05, 2019

Time	Topic
9:00 – 9:30	Calibration and Real World Coordinates
9:30 – 10:00	Communicating with Other Devices (I/O incl. GPM and serial)
10:00 – 10:30	Metrology
10:30 – 10:45	<b>Break</b>
10:45 – 11:45	Lab 10A (Fit Circle) & 10B (Parallelism)
11:45 – 12:00	Optimizations (Profiler)
12:00 – 13:00	<b>Lunch</b>
13:00 – 13:45	Bead Inspection
13:45 – 14:45	Multi-Camera Systems
14:45 – 15:00	Lab 10C (Multi-Module Application)
15:00 – 15:30	<b>Break</b>
15:30 – 16:00	Selected Topic A
15:45 – 16:15	Selected Topic B
16:00 – 16:30	Q&A
16:30 – 17:00	Application Specific Discussions

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Friday, April 05, 2019

<b>Friday – Optional Topics</b>
Code Verify
Color Tool
Custom Steps
Line Scan Cameras
Network Communications- Not QuickComm (TCP/IP, Ethernet/IP, MODBUS, PROFINET)
Recipe Lab (Add & Remove, Change Parameters, Sync)
Robot Step
StringReader
Structure of a Template Project
Using Expressions, Arrays, Variables
Lab 10D (Angularity)
Lab 11 (Calibration with Grid)
Lab 12 (Color Matching)
DA X Preview
Photometric stereo
Depth maps and 3D sensors