

GUI Development stages

GUI iteration 1 - concept:

- Simple image display
- Not main focus for first few months – algorithm and electronics take precedence.



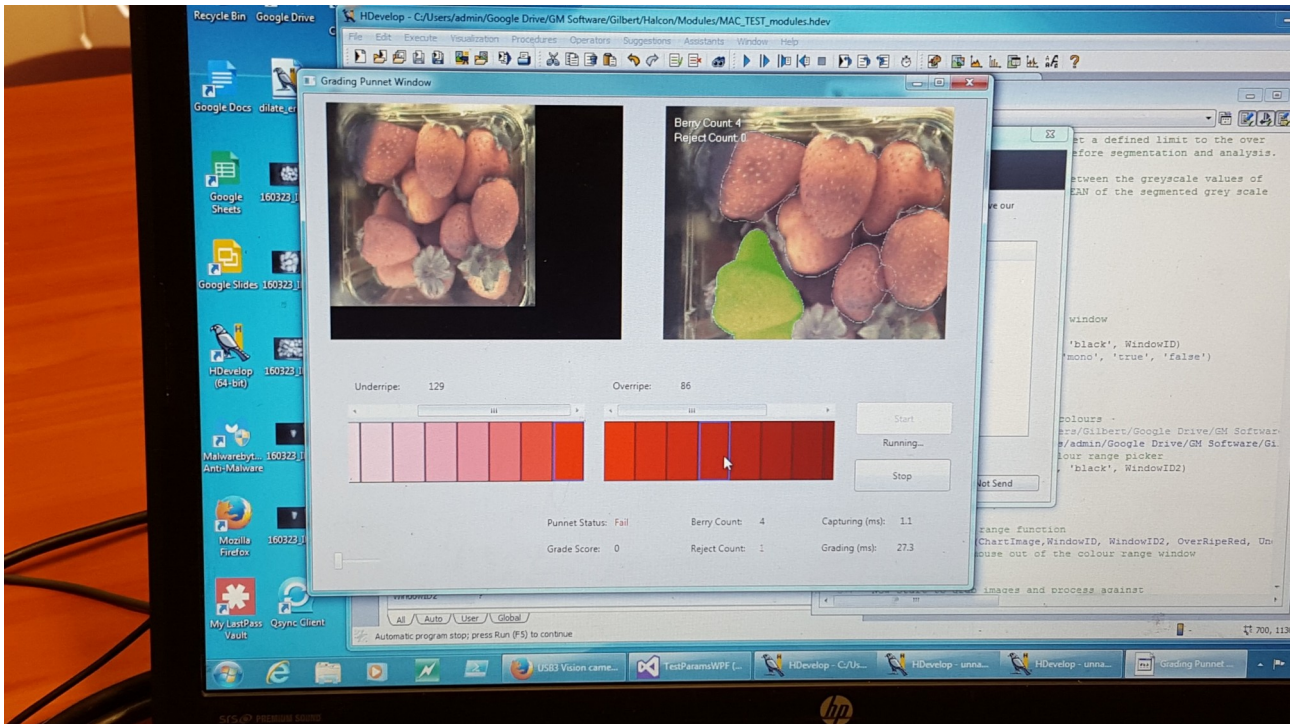
GUI iteration 2 - concept:

- Image display with greyscale adjustment/indicator for seasonality changes.
- Levels assessed post-processing.



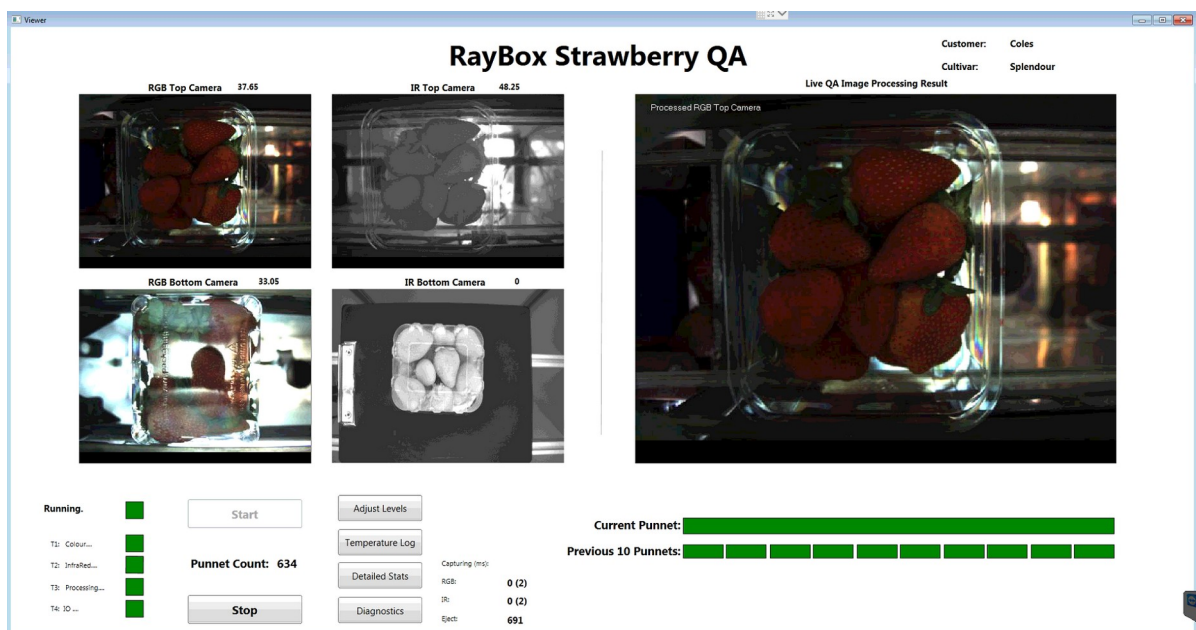
GUI iteration 3:

- First production version
- Only one camera view – needs consideration for future iterations
- Operator can make adjustments by use of GUI controls
- Metrics displayed on screen



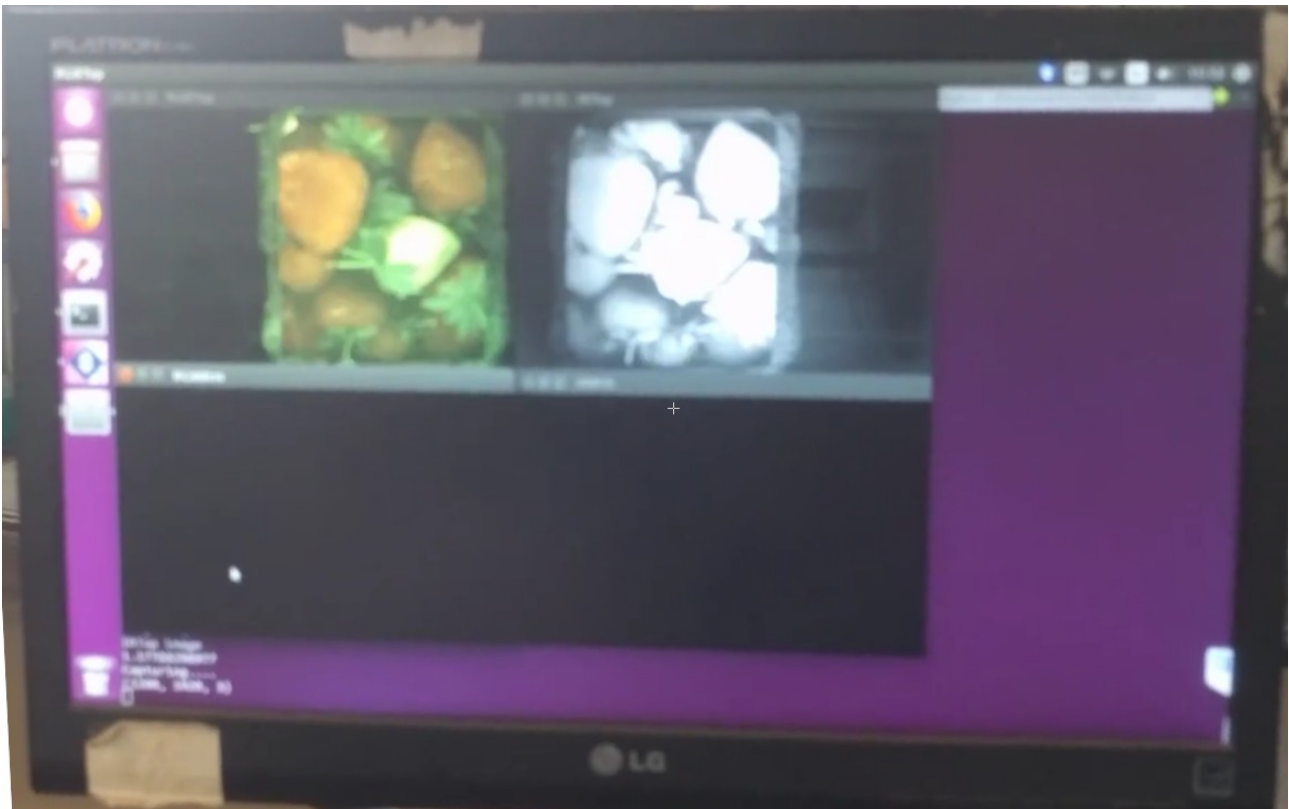
GUI iteration 4:

- MS Visual Studio used to create 4 camera view + main 'processed result' window.
- Better metrics and pass/fail indicators for quick analysis by operators
- Camera temperatures, thread status displayed for development reasons.



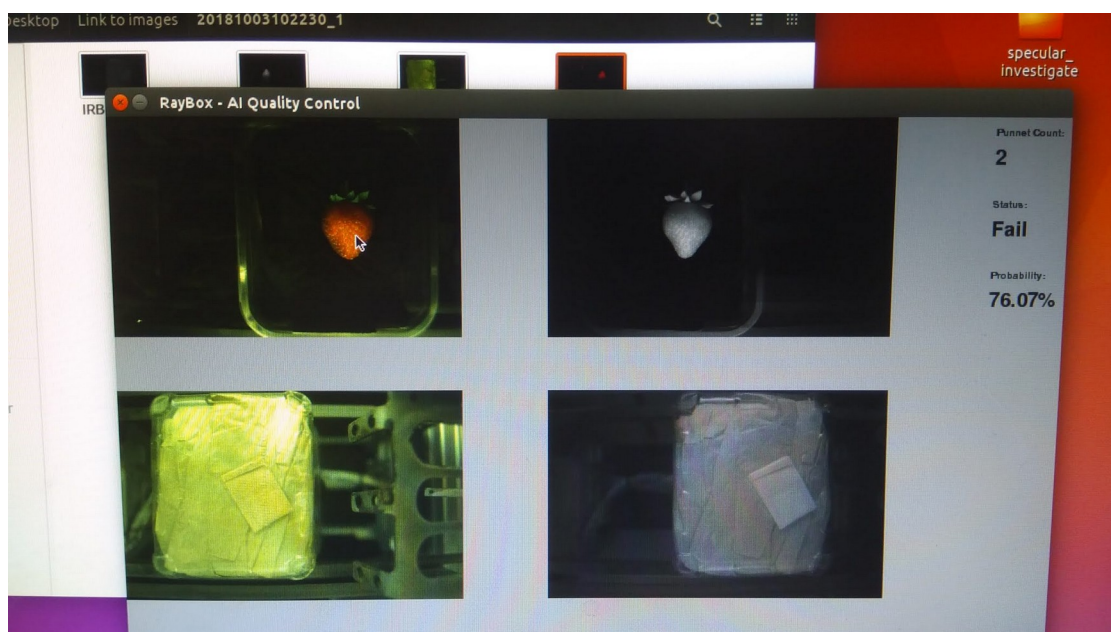
GUI iteration 5:

- First Linux version (opposed to Windows) to enable deep learning methods.
- Very basic view with scope to develop in future



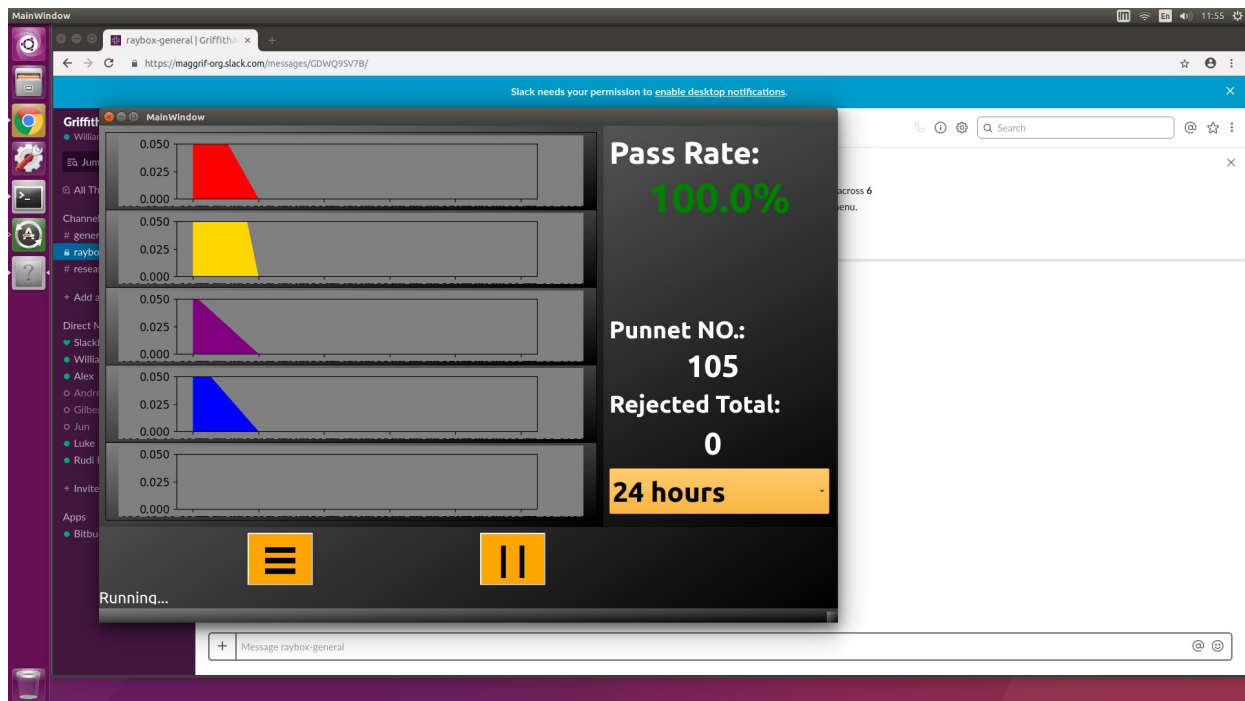
GUI iteration 6:

- Four camera views added
- Basic metrics
- First Machine learning methods used



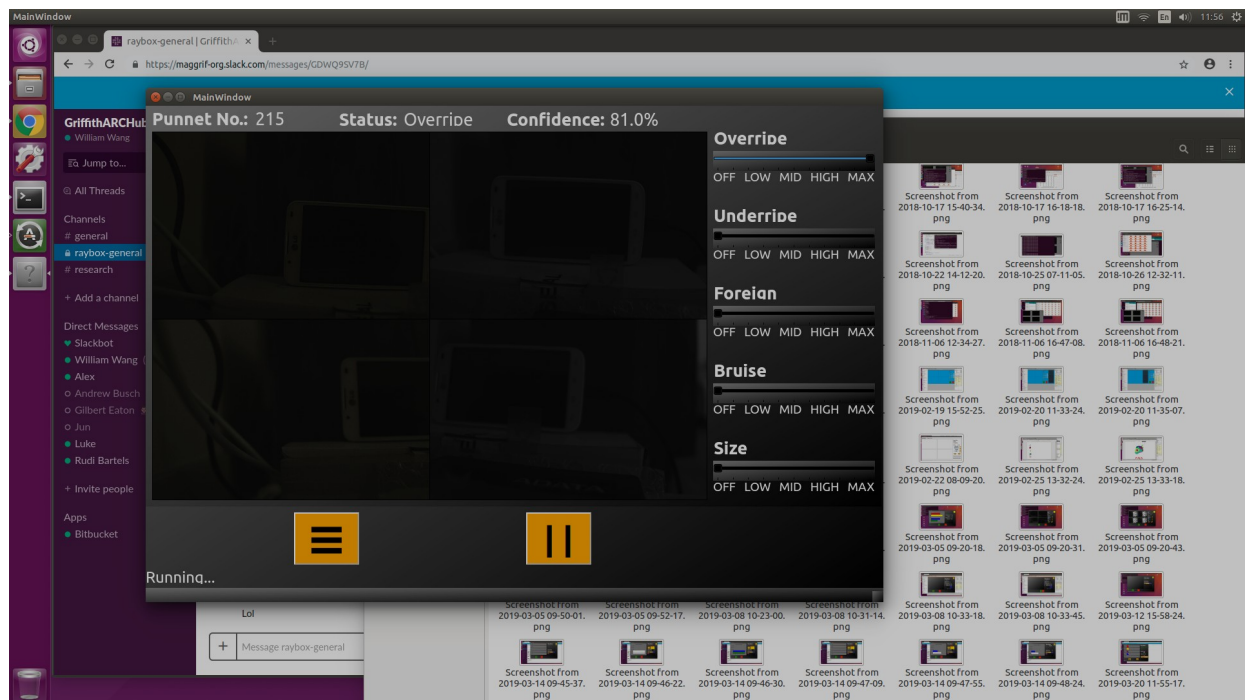
GUI iteration 7a:

- Metrics screen separated from cameras
- Graphing of each defect
- UI best practices for useability



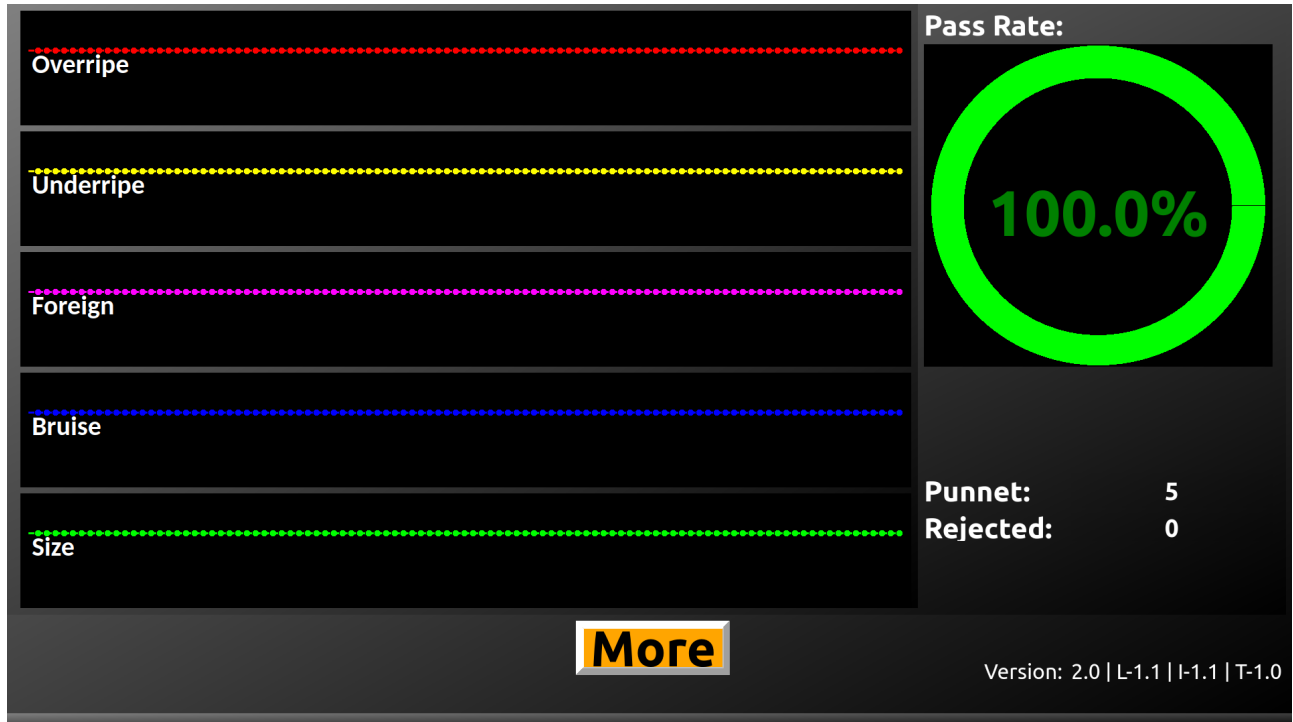
7b:

Image screen



GUI iteration 8a - FINAL:

- Metrics screen refined and simplified
- Background less harsh and main metrics promoted
- Application version added to screen
- Removed close function for professional aesthetics



8b:

Image screen

