## Profile Andreas Heindl - heindl-solutions.com

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## **Skill Summary**

- HALCON
- Modern C++
- Machine Vision
- Build Automation
- Test Driven Development
- Testing
- Qt, QtQuick
- C, Assembler, C#
- HTML, CSS, JavaScript
- Git, svn
- Installer packages
- Platforms: Windows, Linux

### **Academic Qualifications**

2002 - 2007

Diploma in Physics, Technische Universität München (TUM), Major courses:

- Computational Physics
- Semiconductor Physics

# Trainings, Conferences and Certificates

2017

 MVTec Certified Integration Partner

### 2016

- Machine Learning by Stanford University on Coursera
- Contributing member of Munich C++ User Group MUC++

#### 2015

- Volunteer coach for Android development at MINT-Garage Buch am Erlbach
- Certified Qt Developer
- Certified Qt Specialist

2014

### **Profile**

Senior Software Engineer with more than **10 years of experience** in developing machine vision applications using MVTec HALCON. Experienced in **modern C++ development** with a focus on the development of Qt based Graphical User Interfaces for machine vision applications. Seasoned in **build and test automation**, modern web and GUI development, and product versioning and installation management. Loves to work on challenging machine vision problems in his favourite programming language C++.

Specializations cover:

- HALCON development
- Certified Qt Specialist including C++ certification
- Modern GUI development using Web technologies

## **Work Experience**

since 2018 Managing Director at Machine Vision Makers http://www.machine-vision-makers.com/

since 2015 Independent Machine Vision Software
Engineer at Heindl Solutions
http://www.heindl-solutions.com/

# 2012 – 2015 MVTec Software GmbH, Project MERLIC Senior Software Engineer

- Agile developer as part of a medium-size SCRUM team.
- Visual Backend component (Qt / C++)
- MERLIC Engine component (C++)
- Communicate with various Digital I/O, OPC UA
- Internationalization
- Test driven development and automated unit and integration tests.
- Initiated and introduced fast Continuous Build and Test automation (Jenkins, Google Test, Squish) including setup and maintenance to the release workflow.
- Responsible project manager for the introduction and customization of JIRA ticketing system
- Responsible for and speaker in bi-weekly team internal developer talks.
- Leveraged C++11, Qt and Qt Quick for writing flexible, efficient and modern code.

- Qt Developer Days 2014, Berlin
- Qt for Mobile Platforms (Android / iOS)
- Projektmanagement Basiswissen Intensiv
- 31C3 31th Chaos Communication Congress, Hamburg

 Multithreaded, cross-platform development (Windows, Linux; x86, x64).

## 2008 – 2012 MVTec Software GmbH, Project HALCON Software Engineer

- Designed, implemented, tested and documented algorithms and operators in a comprehensive Machine Vision library that is used worldwide.
- Wrote optimized assembler code and intrinsics (e.g. using SSE2 instructions) with speed ups of up to 300%.
- Data code reader (QR codes)
- Responsible for HALCON 11 C++ interface
- Coordinated manual and automatic tests for a major product release.
- Responsible for improving automation of unit test executions.