



lukas elsner

curriculum vitae

born 01.11.1984 in Henstedt-Ulzburg, Germany

education

- 2014–2015 **Master of Information Technology**, *Queensland University of Technology*, Brisbane, Australia.
- Graded: 7 (High Distinction)
 - Software Architecture (Advanced)
- 2015 **Master Thesis**, [*Python, C, Java, VHDL, git, L^AT_EX*], QUT, Schatz Forensic.
- In this project, a low level framework with the goal of reading raw NAND flash devices found on SD-Cards and USB-drives was created. The hardware/software co-design runs on a Pipistrello FPGA board and enables dynamic pin assignment, high speed block orientated I/O and voltage variation to particular pins on the hardware side, as well as a serial interface to an attached remote machine for configuring the hardware and read data from the NAND flash on the software side.
- 2013–2014 **M.Sc. Information Technology**, *University*, Lübeck, Master of Science.
- Software Systems Engineering
- 2013 **Software Systems Engineering Laboratory**, [*Java, Maven, Jenkins, git, L^AT_EX*], Uni Lübeck.
- required course for every Software Systems Engineering student
- 2009–2012 **B.Sc. Information Technology**, *University*, Passau, Bachelor of Science.
- Graded 1.9
 - Minor: Business Administration
- 2012 **Bachelor Thesis**, [*C++, L^AT_EX*], Uni Passau, <http://www.uni-passau.de>.
- planning and implementing an easy-to-use class library on top of a proprietary SDK for prototyping perception platforms with the goal to automate testing within the whole research project (Graded: 1.3)
- 2012 **Research Assistant**, [*C++*], Uni Passau.
- developing and troubleshooting of plugins for a perception platform
 - developing of algorithms for automated image and pattern recognition

- 2011 **Software Engineering Laboratory**, [*Java, Maven, Jenkins, git, L^AT_EX*], Uni Passau.
 - Graded 1.0
 - required course for every Information Technology student
 - funCKit is an editor and simulator for digital circuits
 - the source is released under the GPL
(<https://github.com/mindrunner/funCKit>)
- 2005–2008 **Theoretical Vocational Training**, *Vocational School*, Elmshorn, IT specialist.
 - Software Developer
- 2005–2008 **Practical Vocational Training**, *TecBOS GmbH*, Halstenbek, IT specialist.
 - Software Developer
- 1995–2004 **High School**, *Dietrich-Bonhoeffer-Gymnasium*, Quickborn.

work experience

- since 2016 **Professional Application Engineer / Build Manager**, *SBB CFF FFS*.
 - maintaining the continuous integration applications
 - software development / spring boot
- since 2004 **Software Engineer / IT-Consultant**, *mindrunner*.
 - conducting freelance work as a software engineer and consultant
- 2010–2011 **Software Engineer**, *freifalt GmbH*, Passau/Hamburg.
 - design and implementation of iOS-Apps and their backends
 - responsible for the company's internal infrastructure, a virtualized, heterogeneous network
- 2005–2009 **Software Engineer**, *MSA Auer GmbH*, Halstenbek/Berlin.
 - developing several core products of the company

projects

- 2015 **Android Application**, [*Java, Android, Gradle, git-flow, Jira*].
 - development of an android app for a social network startup company
 - focus on cutting edge android technology
 - REST client / ContentProvider / SyncProvider / material design
- 2014 **TouchIt**, [*Java, Android, Gradle, git, libGDX*].
 - development of an android game based on libGDX
 - published in Google's play store
 - published the source code (GPLv3)
 - <https://github.com/mindrunner/touch-it>
- 2013–2014 **brightup GmbH**, [*Java, C, .NET, OpenEmbedded, git-flow, Jira, Jenkins, BuildBot, Android, iOS*], <http://www.brightup.de>.
 - development of hardware and software for brightup's central unit and z-wave plugs
 - maintenance of general development tools and work flows (bug tracker, version control system, continuous integration)
 - consulting for cloud, smartphone applications and general technical decisions
- 2013 **PhotoBooth and Quickshot**, [*Java, Redmine, Jenkins, EDSDK (Canon)*].
 - two kiosk machine applications for a photo studio
- 2013 **hantPlayer**, [*Objective-C, Redmine, AppKit*], <http://www.hantmade.com>.
 - a native video player with special tagging functions

- 2013 **Stomt**, [*Java, MongoDB, Spring, git-flow*], <http://www.stomt.com>.
 - consulting and the developing of backend and Android-App via pro bono
- 2012 **HydrostopEU**, [*Joomla, PHP*], <http://www.hydrostopeu.com>.
 - complete webpage redesign
- 2012 **Nordflair Ticketsystem**, [*Java, Maven, Jenkins, JPA*], <http://nordflair-events.de/>.
 - co-working on a web-based ticket and entry management system
 - developing the Java-Frontend entry terminal
- 2012 **Templogger**, [*Java, Maven, Jenkins, JPA*].
 - custom service which receives data from GSM-Datalogger: once received, it stores the information into a database and sends warning e-mails according to threshold values
- 2010–2011 **usAR-Hamburg**, [*Java, Maven, Jenkins, JPA, iOS*], freifalt GmbH, <http://www.freifalt.com>.
 - iOS-App which shows up public transportation based on augmented reality
- 2005–2009 **TecBOS.replication**, [*Delphi*], TecBOS GmbH, <http://tecbos.com>.
 - developing a set of windows services with the aim to automatically replicate multiple TecBOS-Databases
- 2005–2009 **TecBOS.mobile**, [*C, Sqlite*], TecBOS GmbH, <http://tecbos.com>.
 - Mobile Windows CE Devices can exchange data with the TecBOS.solutions
- 2005–2009 **TecBOS.webaccess**, [*C#, firebird*], TecBOS GmbH, <http://tecbos.com>.
 - porting the native TecBOS.solutions into a web application
- 2005–2009 **TecBOS.solutions**, [*Delphi, firebird*], TecBOS GmbH, <http://tecbos.com>.
 - maintaining and developing parts of the application as part of my apprenticeship and subsequent employment
- 2008 **CMS**, [*MySQL, PHP*].
 - developing a whole content management system within one week
- 2005–2008 **Web shop**, [*MySQL, PHP*], fontinform GmbH, <http://www.fontinform.com>.
 - planning and development of a web shop for digital fonts

tech skills

