Curriculum Vitae 28 April 2017

### PERSONAL INFORMATION Lukas Erlacher

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www.lerlacher.de

### **Nationality German**

### **WORK EXPERIENCE**

### 2015 – 2017 Systems and Operations Engineer

Department of Computer Science, Technical University of Munich, computing services division

Infrastructure maintenance and internal software development

- Sun Solaris and Linux Servers, both hardware and ESX Cluster
- Mail server, DNS server, repository mirrors, web proxy, configuration management
- User and host database
- Monitoring

### 2011 – 2012 Computer Programmer

Klinikum rechts der Isar, Munich, Orthopedics division

Development of Software to model, visualize, and control medical systems

- Development in and for Windows (XP and 7, 32-bit and 64-bit), in C# / .Net Framework 3,5 and 4
- Automatic and semi-automatic feature recognition algorithms
- Tool development
- Optimization algorithms

### 2010 – 2016 Computer Science Teaching Assistant

Technical University of Munich

TA for the following courses:

- Introduction to Computer Networking and Distributed Systems (lecture and project course)
- Introduction to Computer Architecture (lecture and project course)
- Aspects of Low-Level Programming for Games Development (project course)

All of these courses involved 50% instruction and 50% designing, programming and maintaining support systems for the project labs, e.g. allocating computing resources to students and automated version control, testing, and grading systems.

### 2009 – 2010 TA "Introduction to Computer Science" (for non-Informatics studies)

Java tutorial course for beginners

### 2004 – 2012 Freelance Web Consulting

- Acquisition, setup, administration, and maintenance of PC workstations
- Setup, administration, and maintenance of small LANs
- Setup, administration, and maintenance of web servers, databases, webhostings
- Web development (PHP, HTML, MySQL) for websites and web applications
- Design, development, and maintenance of desktop database applications (MS Access, OO.o Base)
- Setup, customization, maintenance, and content formatting for websites, CMS and boards (Mambo, Joomla!, phpBB)
- Design, content, layout, copy-editing, and prepress for handouts, flyers, posters

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### **EDUCATION AND TRAINING**

### 01 October 2012 - 31 April 2015

### Informatik (Computer Science) Master of Science

**Technical University of Munich** 

■ Applied subject Electrical Engineering, Interdisciplinary Project "Development of the Moep80211 Wireless Mesh Network"

■ Master Thesis "Latency Optimisations in Linux Networking"

## 01 October 2008 – 31 September 2012

### Informatik (Computer Science) Bachelor of Science

Technical University of Munich

- Applied subject Medicine, interdisciplinary project "Human Bone Segmentation"
- Bachelor Thesis "Link-Layer Forward Error Correction for Wireless Mesh Networks"

## 20 September 1999 – 31 July 2008

### Abitur / Allgemeine Hochschulreife (High school diploma)

Gabriel-von-Seidl-Gymnasium Bad Tölz

- AP Physics, English
- Extracurriculars Delphi Programming, Java Programming, Web Programming (HTML, PHP, MySQL)

### 12 September 1995 – 31 July 1999

### Primary education

Volksschule Reichersbeuern

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### PROFESSIONAL SKILLS

### Programming Languages

### Proficient:

- Python (2.7 / 3.5+)
- C#
- C
- Lua

### Intermediate:

- OCaml / Standard ML
- Ruby
- JavaScript
- VHDL

### Beginner:

- C++
- Haskell

# Frameworks / Proficient:

- Stacks / LAMP web applications
- Environments MySQL, Postgres, SQLite
  - C# .Net / WPF desktop applications
  - Postfix / Dovecot / Roundcube / SpamAssassin E-Mail Infrastructure
  - ARM-based Microcontrollers (NXP LPC, Infineon XMC)
  - Linux administration
  - LXC (Linux Containers)
  - Linux-based engineering of scalable and redundant computing services

### Intermediate:

- Docker
- Rails
- Django, Flask (Python web frameworks)
- OpenGL, DirectX

### Beginner:

- Node.js
- Bootstrap

### **Tooling**

### Proficient:

- Git VCS
- Saltstack Configuration Management
- Gitlab Collaboration Platform

### Intermediate:

- Subversion VCS
- Cmake
- Appveyor & Travis Continuous Integration and Delivery

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## EXTRACURRICULAR AND PERSONAL PROJECTS

### July 2004 – Present

### Volunteer Fire Brigade Service

Freiwillige Feuerwehr Greiling

- Level 2 Crew Training
- Performance Badge Silver
- SCBA Training

### September 2013 – Present

### **Electronics and Software Development**

TUfast e.V. ECO Team

- Design and construction of a high-efficiency battery electric prototype vehicle
- Low level embedded peripheral programming, drive control system design and programming, communication bus design and programming, system integration
- Interim propulsion group leader (2014)
- Developed the software for all control systems for Eli15 vehicle, 2015 winner of Shell Eco Marathon and Educ Eco Toulouse competitions
- Refit of ELi14 vehicle for 2016 Guinness World Record "Most Efficient Electric Vehicle"

### April 2014 - Present

### Software Library Development

OnionOO (Tor Project)

- Design and development of an API wrapper library for the OnionOO REST service
- Python 2/3 software distribution
- Transparent data caching

### PERSONAL SKILLS

## Mother tongue(s) Other language(s)

German

UNDERSTANDING		SPEAKING		WRITING	
Li	istening	Reading	Spoken interaction	Spoken production	
	C2	C2	C1	C2	C2
30	(HIGH)	29 (HIGH)	28 (HIGH)		29 (HIGH)

English – CEFR English – TOEFL

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user Common European Framework of Reference for Languages

Driving licence

A, B

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### **REFEREES**

### Technical University of Munich Computing Services Division

Stefan Schwalb

COO

RBG

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www.in.tum.de/en/it-service-group-rbg-of-tu-munich/service/team/leitung.html

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## TUfast ECO TEAM Drivetrain Division

Philipp Wurdak

Technical Director & Division Management Drivetrain

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85748 Garching, Germany

### (Now TQ Group)

tufast-eco.de/en/team-2/tufast-eco-team-2014/

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### Technical University of Munich Networking Chair

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