

HansHardmeier

MSc ETH Computer Scientist

contact

Carl Hans Peter
Hardmeier

Zentralstrasse 101
5430 Wettingen
Switzerland

+41 (76) 379 3985

hanshardmeier@gmail
hanshardmeier.ch
fb://hans.hardmeier



languages


Spanish - Mother
Language
(Swiss) German - Fluently
English - Fluently
French - Moderate
Hungarian - Beginner

Objective

A full-time job with an innovative company in the field of computer science with special interest in visual computing, programming and information/image processing.

Experience

- 2017–Present **Varian Medical Systems** varian Baden, Switzerland
Software Engineer Developer Level 3 on full stack development. Focused on image processing integrations, performance and deployment. Contributed to the world's first AI-driven holistic RT solution ETHOS: <https://www.varian.com/oncology/products/ethos>
Memorable achievements:
 - Lead Deployment Engineer Adaptive Treatment for Halcyon
 - Company Engineering Representative @ ESTRO '19
- 2015–2017 **ATEGRA AG**  Zollikon, Switzerland
Software Engineer Developer of information processing applications based on IBM Lotus Notes, Javascript, VB, Formula, Java and more. Server and System administrator for several projects on Windows and Linux. Co-Designer and Reviewer of several project architectures.
- 2015–2017 **ABB Switzerland** **ABB** Baden, Switzerland
HR Student Worker Redesign and implementation of VBA-based documents for interaction and information processing in the human resources department.
- 2015 **ABB Headquarters** **ABB** Oerlikon, Switzerland
NeXT Level PMO Student Worker Training, Monitoring and Support of NeXT (Global implementation monitoring/tracking tool).
- 2013–2014 **Arteries Studio Gmbh**  Budapest, Hungary
Junior Developer & Intern Server Administrator
Design and Development of mobile software for Android devices. Responsible for the administration of the GIT server repositories.
Memorable achievements:
 - Lead Developer Project LARA: laraapp.com
 - Lead Android Group Project BKK FUTAR App
 - Headhunted by Aarensen Consulting (Dec. '13)
- 2012–2018 **Reach Bangladesh** **REACH BANGLADESH** Dulliken, Switzerland
Co-Founder/Coordinator Europe - Project Bangladesh
'Project Bangladesh' would like to finance needy children in Bangladesh free schools, and thus increase their probability of survival. The aim is to give the children a vision of hope and love. (<http://www.reachbangladesh.org>) Responsible for budget planning, coordination, publicity and web presence.
- 2011–2013 **VBG Switzerland** **vbgs** Zürich, Switzerland
Media and Web responsible / Leader
Member of the Swiss delegation at the 2011 IFES World Assembly in Krakow, Poland. Advisor at the IFES European Student Leadership Forum 2013 in Heidelberg, Germany.

2009–2010 **Swiss Army**  **SECURITON** Birmensdorf, Zürich
Infanterist & UewSyst Specialist
 UewSyst is a mobile monitoring system that relieves the security staff in monitoring sites and objects in an effective and suitable way. Work together with the national police, border guards, civil protection and Securiton. (<http://www.uewsyst.ch>)

Education

2014–2016 **Master** of Science ETH in Visual Computing ETH Zürich
Thesis: Comparison of handcrafted vs learned feature descriptors for Structure-from-Motion with Prof. Marc Pollefeys
 Contribution to the research of the Computer Vision and Geometry Group of the ETHZ. Published Paper CVPR17. Grade: 5.75/6

2010–2013 **Bachelor** of Science ETH in Computer Science ETH Zürich
Thesis: CRF for joint ball and opponent detection, and self-localization with Prof. Luc van Gool. Part of the Computer Vision Team of the ETH for the RoboCup 2013. Responsible for the extension of the CRF Model of the Robot's field perception. <http://www.robocup.ethz.ch>. Grade: 5.5/6

2005–2009 Swiss National **Matura** Alte Kantonsschule Aarau
 Applied Mathematics and Physics / Informatics

Courses

Basic **General basic studies** Zürich, Switzerland
 Analysis, Linear Algebra, Digital Circuits, Physics, Eiffel Programming, Discrete Mathematics, Data structures and Algorithm & Parallel Programming

Main **General CS studies** Zürich, Switzerland
 Data Modeling and Databases, Numeric Methods for Computer Science Engineering, Theoretic Informatics, Software Engineering and Architecture, Functional Programming, Formal Methods, Operating Systems and Networks, Probabilities and Statistics, Systems Programming and Computer Architecture

Specialisation **Visual Computing studies** Zürich, Switzerland
 Visual Computing, Distributed Systems, Numeric Methods for Partial Differential Equations, Principles of Interaction Design, Human Computer Interaction, Simulation and Modeling, Computer Vision, Physically based Animations, Probabilistic Artificial Intelligence, Machine Learning, Quantum Informatics, Graph Theory, Algorithm Labs, Computational Biology, Computer Graphics, Advanced Systems

BSc Thesis **Computer Science studies** Zürich, Switzerland
 Conditional Random Field for extended Perception Model for RoboCup. Advisors: Xavier Boix and Gemma Roig. Supervisor: Prof. Dr. Luc van Gool

MSc Thesis **Computer Science studies** Zürich, Switzerland
 Comparison of handcrafted vs learned feature descriptors for Structure-from-Motion. Advisors: Johannes L. Schoenberger and Dr. Torsten Sattler. Supervisor: Prof. Dr. Marc Pollefeys

Publications & Certificates

CVPR17	Evaluation of Learned Local Features Matching local image descriptors is a key step in many computer vision applications. This paper is dedicated to an extensive experimental evaluation of learned local features to establish a single evaluation protocol that ensures comparable results.
IBM	IBM Certified Advanced Application Developer - Notes and Domino 9.0 Successfully passed on premise IBM certification exams
IBM	IBM Certified Advanced System Administrator - Notes and Domino 9.0 Successfully passed on premise IBM certification exams

Skills

Operating Systems

Android, Linux, OSX, Microsoft Windows 7,8,10

Computer Languages

C#,C++, C,JAVA, Eiffel, Matlab,VBA, VB, Javascript, Python, Lua, Formula

Frameworks, Platform & Scripting Languages

.Net, ASP.Net Core, gRPC, Acronis, Powershell, Bash, Docker, Kubernetes

Modeling languages & Database systems

UML, Flowchart, MySQL, PostgreSQL, SQLite, LocalDB

DVCS & Others

SVN, GIT, GDB, CUDA, Theano, Torch7, CMake, Seq

Organisation

ADLM,TFS, Azure DevOps, SCRUM Master

Interests

Professional

Intercultural project management, computer vision development

Personal

Piano, Guitar, Cooking, Strategic sports, E-sports, Christian theology, Philosophy

References

References available upon request