Personal Data



Name Matteo Corti

Date of birth 12 September 1974
Place of birth Lugano, TI, Switzerland

Marital status Married

Citizen of Aranno, TI, Switzerland

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Education

2016-2017	Certificate of Advanced Studies, Leadership und Governance an Hochschulen, Universität Zürich, Switzerland.
1999-2005	Doctoral degree in Computer Science (Dr. sc. techn.), ETH Zurich, Switzerland.
	Thesis: Approximating the Worst-Case Execution of Soft Real-Time Applications.
1993-1998	MS Computer Science (Dipl. Informatikingenieur ETHZ), ETH Zurich, Switzerland.
	Diploma thesis: A Profiler/Analyzer for XOberon/PowerPC.
1989-1993	Liceo scientifico (High School), Lugano, Tl. Maturità tipo C (scientific curriculum).

Experience

Since 2022

Operation Manager, Information and Communication Services, ETH Zurich.

- Responsible for the stability and performance of the services and infrastructure.
- Responsible for service and infrastructure monitoring.
- Incident management.
- Project Management.
- Advise and represent the department management about technical projects and topics.

2013-2021

Head of the User Services Section, Information and Communication Services, ETH Zurich.

- Manage 45 persons (five groups) that are responsible for the operation of the university's managed applications (among others: mail, printing, databases, web servers, application hosting and client delivery)
- Member of the management board

2008-2013

Head of the Identity/Access Management & eServices Group (formerly Web Applications and Identity Management), Information and Communication Services, ETH Zurich.

- Manage four to seven persons who develop the in-house identity management system and web applications for ETH customers.
- Design and implementation of the Swiss DOI registration infrastructure (J2EE).
- Design and implementation of the next generation identity management system (Oracle, Java).
- Manage several web application development projects (e.g., Menuela,

SwissUNI)

- Joint work on an order management engine framework (Lakshmi on JEE).
- Maintain a series of legacy web applications (Perl, Oracle).

2006-2007

Lecturer, ETH Zurich.

- Teach the Compiler Design II class (fall semester 2007).
- Teach the *Computer Systems Lab* (operating systems practical lab) with around 40 students (spring semester 2006 and 2007).

2005-2008

Software Engineer, Information and Communication Services, ETH Zurich.

- Design and implementation of identity management software modules (Oracle, Perl).
- Design and implementation of prepaid billing system for the ETH centralized printing system (Oracle, Perl).
- Development of tools to administer and monitor Apache server farms (C, Perl).

2005

Compiler Engineer, Freescale Semiconductor, Zurich.

Alias analysis (C++)

2004-2005

Lecturer, ETH Zurich.

 Teach the System Software (operating systems fundamentals) core lecture with 180 students. This includes the organization of the lab classes, teaching assistants and exams.

1999-2004

Research and teaching assistant, ETH Zurich.

• Research:

- Worst-case execution time analysis of soft-real-time Java applications both on the semantic level (e.g., loop bounding, type analysis) and the hardware level (i.e., instruction duration estimation).
- Joint work on an optimizing ahead-of-time Java bytecode to native compiler (several SSA based optimizations and analyses related to various research projects).
- **Teaching**: exercise sessions of *System software*, *Compiler construction I & II*, *Computer science I* (introductory course), *Computer science III* (programming in the large), *Patterns and frameworks* (industry courses).

2000

Swisswin, Rupperswil, part-time job.

• Teach the networking classes for a webmaster course.

1997-1998

Internship at FIDES/EDS, Zurich.

- Designed and implemented a tool to replicate the database structure of the Credit-Suisse stock funds management application (Sybase, C, SQL).
- System administration (AIX).

1997-1998

ETH Zurich, part-time job.

• Developed a web interface for a database of inter-enterprise mechanical components (Perl).

Publications (ORCID: 0000-0002-1746-1108)

- M. Corti, *Approximating the Worst-Case Execution of Soft Real-Time Applications*, PhD Thesis, ETH Zurich, March 2005, Nr 15927, doi:10.3929/ethz-a-004937456.
- M. Corti and Th. Gross, *Approximation of the Worst-Case Execution Time Using Structural Analysis*, Proceedings of the Fourth ACM International Conference on Embedded Software (EMSOFT 04), September 27–29, 2004, Pisa, Italy, doi:10.1145/1017753.1017797.
- M. Corti and Th. Gross, *Instruction Duration Estimation by Partial Trace Evaluation*, Proceedings of the WIP Session of the 10th IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS 04), May 25–28, 2004, Toronto, Canada.
- M. Corti, R. Brega, and Th. Gross, Approximation of Worst-Case Execution Time for Preemptive Multitasking Systems, Proceedings of the ACM SIGPLAN 2000 Workshop on Languages, Compilers, and Tools for Embedded Systems (LCTES'2000), June 18, 2000, Vancouver, Canada, doi:10.1007/3-540-45245-1 12.
- M. Corti, A Real-Time Profiler/Analyzer for XOberon/PPC, Diploma Thesis, ETH Zurich, 1998.

Open source software

PASI & SCORAD	JavaScript web applications to compute the PASI (Psoriasis Area Severity Index) score (http://pasi.corti.li) and the SCORAD (SCORing Atopic Dermatitis) score (http://scorad.corti.li),
svnauthcheck	A tool developed in C to delegate Subversion access control to the end users: https://svn.id.ethz.ch/docs/svnauthcheck.html
roll	A command line dice roller implemented in C: http://matteocorti.github.io/roll/
daemonizer	A tool implemented in C to detach Unix processes from the terminal: https://github.com/matteocorti/daemonizer/wiki
bashcritic	A tool in Perl to check shell scripts for common pitfalls: https://github.com/matteocorti/bashcritic/wiki
Nagios plugins	Around 16 plugins for the Nagios monitoring software mainly in Perl: https://github.com/matteocorti

Continuing education

Management

- MarsLander Simulation, Agile service management, one day course, 2018
- Auf den Punkt kommen. Klare Kommunikation in Standortgesprächen, one day course, 2018.
- The Challenge of Egypt, PRINCE2 (Project management) simulation, one day seminar, 2010.
- ITIL® v3 Foundation exam, EXIN, 2009.
- Mitarbeiterführung Grundlagen, three days seminar, BWI, 2008.
- Projektmanagement Projektführung, three days course at ETH Zurich, 2008.
- Projektmanagement Methodik, three days course at ETH Zurich, 2008.

Engineering

- JavaScript and jQuery Web Programming, one day course at ETH Zurich, 2012
- OO-Analyse und -Design mit UML, three days course by Digicomp, 2010.

- Core Spring, four days course by Spring source, 2010.
- Perl Advanced Module Interface Techniques, Understanding Regular Expressions, Perl 5.10, three days seminar with Damian Conway, 2008.
- Perl Best Practices, two days seminar with Damian Conway, 2007.

Skills

Management Division head since 2013 (around 45 persons), team leader from 1998 to 2013(group with four to seven persons), managed several projects.
 Architecture Design of authentication and authorization infrastructures, framework design.
 Java Worked several years on Java compilers in Java. Working with JEE since 2008 (JMS, JSF, Spring, JSP, ...).
 Perl Several years of experience working on a custom identity management system and several tools used in system administration.
 C Several open source tools (Unix).
 Databases Oracle, MySQL, PostgreSQL.
 Various UML, Adobe CQ5, Oberon, System administration (Linux, Mac OS X), LaTeX.

Languages

• Italian native language

• German fluent

• English fluent (Cambridge Certificate of Proficiency in English)

French good

Volunteer experience

- Swiss Red Cross, "Mitten unter uns". Linguistic exchange to help with the integration of foreign children.
- Stiftung kihz. Voulounteer work with kindergarten children with small robots (Bee-Bot)