

Clemens Krainer

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Education

2010-2017	Department of Computer Sciences University of Salzburg, Austria	Dr.techn., Doctoral Programme, Technical Sciences, Informatics
2005-2009	Department of Computer Sciences University of Salzburg, Austria	Dipl.Ing., Applied Informatics
2000-2004	University of Applied Sciences and Technologies, Salzburg, Austria	Dipl.-Ing.(FH), School of Telecommunications Engineering

Skills/Experience

- *Designed and implemented* the Cyber-Physical Cloud Computing PaaS software (Java).
- *Designed and implemented* the UC Berkeley FlexPass Study software (Java, Android).
- *Designed and implemented* the Cyber-Physical Cloud Computing simulator software (Java).
- *Designed and implemented* the JNavigator autopilot software for the JAviator four-rotor model helicopter (Java).
- *Designed and implemented* batch applications to electronically interchange data for the automotive industry (Java/Perl).
- *Designed and implemented* an ISO 9001 compliant quality management system for a software engineering company (successfully certified in 2005 by Quality-Austria).
- *Designed and implemented* a fault tolerant CORBA load balancer prototype for a scalable car retailer system (C++).
- *Managed* security and software projects.
- *Designed* security concept and implemented firewalls for a software engineering company.
- *Developed* an automated software distribution system for about 100 IBM Unix machines and executed software updates.
- *Developed* server software for car retailer systems (C/C++/Perl).
- *Administered* Unix machines.
- *Languages:* German (mother tongue) and English (business fluent).

Employment History

2015-present	Porsche Informatik GmbH	Senior Software Engineer
2014-2015	University of California, Berkeley	Research Scholar
1992-2014	Porsche Informatik GmbH	Systems Engineer
1986-1992	Siemens-Austria AG	Systems Programmer

Publications

1. C. Krainer. “Cyber-Physical Systems as a Service”. Doctoral Thesis, Department of Computer Sciences, University of Salzburg, Austria, 2017.
2. A. Foina, R. Sengupta, P. Lerchi, Z. Liu and C. Krainer. “Drones in Smart Cities: Overcoming Barriers through Air Traffic Control Research” In: *Workshop on Research, Education and Development of Unmanned Aerial Systems (RED-UAS)*. 2015.
3. A. Foina, C. Krainer and R. Sengupta. “An Unmanned Aerial Traffic Management Solution for Cities Using an Air Parcel Model” In: *International Conference on Unmanned Aircraft Systems (ICUAS)*. 2015.

4. E. Pereira, C. Krainer, P. M. Silva, C. Kirsch and R. Sengupta. "A Runtime System for Logical-Space Programming". In: *Proc. Workshop on the Swarm at the Edge of the Cloud (SWECC)*. 2015.
5. C. Krainer and C.M. Kirsch. "Cyber-Physical Cloud Computing Implemented as PaaS". In: *Proc. Workshop on Design, Modeling, and Evaluation of Cyber-Physical Systems (CyPhy)*. ACM, 2014.
6. E. Pereira, P. Silva, C. Krainer, C. Kirsch, J. Morgado and R. Sengupta. "A Networked Robotic System and its Use in an Oil Spill Monitoring Exercise" In: *Swarm at the Edge of the Cloud - ESWeek13*, Montreal, Canada, 2013.
7. C. D. Krainer. *JNavigator - An Autonomous Navigation System for the JAviator Quadrocopter Helicopter*. Diploma Thesis, Department of Computer Sciences, University of Salzburg, Austria. September 2009.
8. C. Krainer. *Evaluation and Selection of a Fault Tolerant CORBA Load Balancing Strategy*. Diploma Thesis, School of Telecommunications Engineering, Salzburg University of Applied Sciences and Technologies, Austria. September 2004.