

Subramanya Umashankar

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www.github.com/HackRanger



Education

- 2013–
Expected **MSc, Distributed Systems Engineering**, *Technische Universität Dresden*, Dresden, Germany.
- April 2016 Defending thesis: “Elastic Load Scaling for Audio/Video Conferencing Services”
advisor: Dr. Kateryna Rybina
- 2004–2008 **Bachelor of Engineering in Information Science & Engineering**, *Visvesvaraya Technological University*, Karnataka, India.
advisor: Dr. Ravi Kumar V

Experience

- 2013–Present **Werkstudent- Cloud Operations**, *Cloud&Heat Technologies GmbH*, Dresden, Germany.
Started with the responsibility of setup monitoring and alerting (Check_mk a nagios based monitoring software) infrastructure for the cloud. Maintaining day-to-day operations problems in cloud infrastructure. Automating the infrastructure management with Chef and Chef-server. Bare metal provisioning using PXE boot, Cobbler, Bash and Chef. Making Openstack installations for new deployments. Maintaining build infrastructure with jenkins.
Challenge Scalability engineering, Field service engineering
- 2011–2012 **Senior Engineer- Software, Research & Development Healthcare**, *Philips India*, Bangalore, India.
Development of Filed Service software for Philips X-ray machines. Migrating the existing use cases from C++ to C# WPF. Setting up build process and system integration with Jenkins. Framework testing/API testing of Philips Field Service Framework. Maintaining software quality procedures to support FDA Quality System Regulations guidelines. Conducting system testing of software and hardware at Philips Medical Systems Hamburg facility. Successful in setting system's compliance with its business requirements.
Challenge Software engineering for life-critical systems, Development of complex software framework, Reliability engineering
- Jul 2010–Oct 2010 **Business Analyst**, *Mu-Sigma Business Solutions*, Bangalore, India.
At Mu-Sigma Business Solutions as part of Innovation and Development team. Setting up Hadoop cluster and Hadoop jobs for real-time analytics for stream of textual data, and Complex data visualisation using R.
Challenge Developing scalable system, statistical data modeling and visualisation.

2008–2010 **Engineer- Software**, *SLK-Software Solutions*, Bangalore, India.

Started working as a junior software developer for Financial domain softwares which includes Banking, Insurance and Investments. After successful completion of training on Silverlight and rich web application, I was responsible for prototyping various parts of the personal financial planner software. Prototyping of various reusable UI components, security features, location based services, deployment challenges of rich web applications and compatibility with mobile/handheld devices. Raising to developer level, I was responsible for requirement analysis and design of point of sales application for art gallery using Microsoft Windows Presentation Framework (WPF) and administration back end using Microsoft Silverlight.

Challenge Developing reusable prototypes, portability for user interface

Publications

Rybina, K., Dargie, W., Umashankar, S., and Schill, A. Modelling the live migration time of virtual machines. In *On the Move to Meaningful Internet Systems: OTM 2015 Conferences* (2015), Springer, pp. 575–593.

Umashankar, S., and Mohan, P. Page ranking in relational based search engine. In *Technoblitz* (2007), V.V.C.E Mysore.

Technical Experience

Extremely Proficient With

languages C, Python, C#, Ruby, R, HTML, CSS, JSON, Java
technologies Apache, Nginx, Django, MySQL, SQLite, Bash Scripting, Git, Vim, Ubuntu & Red Hat Linux, .NET
IaaS Openstack, Amazon Web Services (AWS)
PaaS Google App Engine, CloudControl, AppElevator

Have Experience With

languages Javascript, Clojure
technologies SQL Server, Visual Studio, Eclipse

Relevant Coursework

Technische Universität Dresden, Dresden

computer science Systems Engineering, Software Fault Tolerance, Dependable Systems, Software Design Patterns & Frameworks, Security & Cryptography I, Concurrent and Distributed Systems, Concurrent Data structures and Algorithms
theoretical computer science Complexity theory, Deductive systems, Machine Learning, Knowledge representation and reasoning

Visvesvaraya Technological University, Karnataka

computer science Programming Languages, Software Engineering, Database systems, Automata Theory, Operating systems, Real-time systems
business Entrepreneurship and business management, Management information systems

Honors

Visvesvaraya Technological University Best Paper Award at “Technoblitz 2007 V.V.C.E Mysore” for the paper “Page Ranking in Relational Based Search Engine”