Juraj Skripsky

Curriculum Vitae

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Personal Details

Date of Birth	January 27th, 1976
Place of Birth	Schlieren ZH, Switzerland
Nationality	Swiss, Slovak

Work History

2014   **Scientific Staff Member (part-time)**, *HSR Hochschule für Technik*, Rapperswil.
Role: Scrum Master and Software Engineer.
Architecture and development of a web-based Precision Farming system (Ruby on Rails, JavaScript/TypeScript, Leaflet library, various GIS tools).

2012–2013   **Senior Software Engineer (part-time)**, *Greenliff AG*, Zurich.
Development of a graphical configuration application for Smart Cards, in a small Scrum team (C#, ASP.NET Web API, JavaScript, Knockout.js library, Web Sockets, Chromium Embedded Framework).
Development of a Jenkins plugin (Java).
Rewrite of an internal tool for time tracking (from Java to F#).
Introduction of Git for all subsequent development projects at Greenliff.

2005–2013   **CEO and Software Engineer**, *HotFeet GmbH*, Zurich.
Development of websites and web applications (C#, JavaScript, F# since 2011).
Complete technological transition from PHP+MySQL to Mono+ASP.NET+db4objects.
Complete rebuilding of internal web and mail hosting infrastructure with focus on performance and security. Installation, configuration and maintenance of multiple Linux-based servers and services (web, mail, dns, ftp, ldap,. . .). Introduction of various development tools (Wiki, code versioning system, project and issue tracking system, task tracker).

2003–2009   **Open Source Contributor**, *Mono Project et al.*
Mono: Major rewrite of important components (Dictionary class, Array.Sort methods, SQL where-clause parser and evaluator), bug fixes (ASP.NET, xsp/mod_mono), optimizations (Regex matching engine) and enhancements (C#, C). Intimate knowledge of class libraries and runtime.
NPlot: bug fixes, enhancements (C#).
Typeface-js: bug fixes, enhancements (JavaScript).

2002–2004   **Software Engineer**, *HotFeet GmbH*, Zurich.
Development of websites and web applications (PHP, and the occasional pinch of Perl).

2000   **Internship**, *Theissen Security Systems AG*, Sissach.
Analysis of the data flow and storage of a proposed client-server based E-commerce system with regard to security and applicable cryptographic methods and protocols.
Development of a GUI prototype for the proposed system (Java, Swing library).

1998   **Software Developer**, *3C Systems AG*, Urdorf.
Design and development of testing software for a proprietary Smart Card transfer protocol (C++).

1995   **Software Developer**, *Ulrich Electronic GmbH*, Gleisdorf, Austria.
Complete rewrite of PV for graphical environments (C++, zWindows library, multi-platform).

1993–1996   **Freelance Software Developer**, *Koelliker Büroautomation AG*, Wallisellen.
Design and development of "PV", a system for the entry and storage of patient's personal data for hospitals (C++, Turbo Vision library).
Development of a driver for a proprietary form printer (C++).
Development of a driver for a Smart Card reader (C++).

1992–1993	**Freelance Software Developer**, *IWB Industrielle Werke Basel*, Basel.
	Development of a tool for the analysis of data from a proprietary time management system (C, Assembler).
1992	**Freelance Software Developer**, *WARO AG*, Basel.
	Development of data conversion tools (C).
1991–1992	**Freelance Software Developer**, *Koelliker Büroautomation AG*, Wallisellen.
	Development of multiple small command line tools (C, Assembler).

Education

1996–2002	**Master of Computer Science**, *ETH Zurich*.
	Focus on cryptography, security and information theory, software architecture and design patterns, the Unix architecture, computer graphics and image analysis.
	Master thesis: *The Gap Between Intrinsic Information and the Secret Key Rate* (http://www.hotfeet.ch/about-us/papers/js/gap-between-intrinsic-info-and-ska.pdf).
	Minor subject: Business Studies.
2001–2002	**Assistant for Lecture "Informatik III"**, *ETH Zurich*.
	Programming paradigms: Functional Programming (Standard ML), Logical Programming (Prolog) and Object-Oriented Programming (Java).
2001–2002	**Didactic Training with Practical Guidance**, *ETH Zurich*.

Languages

German, Slovak	**native**
English	**fluent**
French	**basic**

IT Skills

Excellent

Languages	C# (since 2003), F# (since 2011), Java, C++ 98, C, Assembler
Platforms	.NET and Mono (since 2003)
Paradigms	Object-Oriented Programming and GoF Design Patterns, Functional Programming
Web	ASP.NET, XHTML/HTML5, CSS/Sass, JavaScript, jQuery, Knockout.js, REST, Web Sockets
Databases	MySQL, MS SQL Server, db4objects, Apache Lucene.net
Data Interchange	XML, XSLT/XPath, XSL-FO, Json
DevTools	Git, Subversion, Jenkins, Atlassian Jira
Methodologies	Agile, Scrum, GTD
SysAdmin	Linux (since v2.0, RedHat/Fedora, Debian): System and network administration, shell scripting, virtualization (VMware, KVM + Qemu).
	Services: MySQL, Apache (http) + mod_mono, Postfix (smtp) + Dovecot (pop, imap), PowerDNS, OpenLDAP, Nagios (monitoring), ProFTP, Spamassassin + SQLGrey

Good

Languages	Python, Ruby, TypeScript, Prolog, Perl
Meta-Programming	F# Code Quotations and Computation Expressions, F# Compiler Service AST/Symbols/Types, MSIL/System.Reflection.Emit, Mono.Cecil

Basic

Languages	Haskell, Rust, LLVM IR
Foundations	Type Theory, Category Theory, Compiler Design

Publications

A New Measure for Conditional Mutual Information and its Properties (Renato Renner, Juraj Skripsky and Stefan Wolf. Presented at the ISIT 2003 in Yokohama, Japan. http://www.hotfeet.ch/about-us/papers/js/rsw03.pdf)

Interests

- Literature (mostly english): technical and fictional, theater plays
- Mathematics and Physics
- Psychology
- Running, Tennis, Hiking

Links

- *LinkedIn Profile:* https://www.linkedin.com/in/juraj-skripsky-4338a217/
- *GitHub Profile:* https://github.com/jskripsky
- *Mono Contributions:*
  https://github.com/mono/mono/search?q=Skripsky&type=Commits

- *HotFeet Website:* http://www.hotfeet.ch/home.aspx
- *GitHub Profile:* https://github.com/HotFeet