

Ilka Guigova

Qualifications Summary

Honors B.Sc. in Mathematics. 10+ years software engineering. Involvement in all aspects of the software development cycle – analysis, design, development, documentation, integration, and maintenance. Work on various applications for the marine, automotive and hospitality industries with performance-critical and high-reliability requirements. Compliance with Payment Card Industry and Information Processing Security standards. Assistance in the research and implementation of projects in the areas of artificial intelligence and mobile devices. Web applications. Active member of the software development community. Interest in computer algorithms and software architecture.

Highlights: Software Engineer, 06/2000 – present

- . Javascript, C#, Delphi, Java, C++, Erlang, Python, Haskell, Racket
- . PostgreSQL, Microsoft SQL Server, Oracle, Excel
- . Git, Tortoise SVN/Subversion, Serena PVCS Version Manager

Worked on protected email information exchange. Developed a framework for setting management. Researched and adopted Security Best Practices defined in FIPS 140-2. Ensured smoother and asynchronous email attachment handling. Implemented a message processing appliance to prevent data leaks when using only MS Outlook. Extended the API infrastructure with backwards compatibility.

Worked on custom Microsoft Office plug-in development and integration.

Worked on Scriptivate - an online theater production script editor and resource manager. Provided support for conflict analysis, french scene analysis, licensing, permissions, and notifications. Implemented common interface for integration with PayPal Website Payments Pro program.

Worked on six-tier Web Service Enterprise Resource Planning (ERP) system for port and regional vessel traffic authorities and related service providers. Implemented and optimized a self-learning mapping engine processing 300+ calls per second. Volunteered on the Content Management Committee.

Integrated legacy, newly developed, and third party code processing millions of payment transactions per month in compliance with the Payment Application Data Security Standard (PA-DSS). Reduced complexity which increased response time by 40% and cut QA turnaround time by 33%. Moderated software inspections which improved early error detection by a factor of five.

Implemented solutions for graphical user interface, configuration, error proofing, and process control of floor operations in various automotive assembly plants in Northern America. Led a feasibility study researching new ultrasound localization algorithms and technology. Planned the transition to a fully automated testing process in compliance with IEEE standards.

Worked on a Canadian Space Agency sub-contract for a robot simulation system. Developed SolidWorks/AutoCAD plug-in for network communications.

Education

- . Machine Learning, Intro to AI, Intro to Databases (Statement), Stanford Online Courses, 12/2011
- . Project Management (Certificate), Centennial College, Toronto, ON, 04/2007
- . Technical Writing (Course), George Brown College, Toronto, ON, 09/2006
- . Mathematics Specialist (Honors B.Sc.), University of Toronto, ON, 06/2002