

Ilka Guigova

15+ years software engineering for the marine, automotive, hospitality, art, and communications industries with performance-critical and high-reliability requirements in compliance with security protocols and standards. Research and implementation of projects in the areas of artificial intelligence and mobile devices. Web applications.

C#, Java, Kotlin, Clojure, Erlang, Haskell, R, React, Node.js, Javascript

Mathematics Specialist (Honors B.Sc.), University of Toronto, ON, Canada, 2002



Willow Inc: The digital twin of the built world. Worked with pulumi and azure pipelines to automate the deployment of product infrastructure. Joined the customer support incident resolution team



Bread&ButterIO: Built a performance benchmarking and testing framework. Worked on Wordpress, Shopify, and ElasticPath integrations. Prepared an iOS API library. Implemented OAuth 1.0, OAuth 2.0, OIDC, SAML 2.0 protocols in the context of 35+ identity providers.



Worked on a secure email messaging system with support for large file sharing, electronic signatures, and campaigns ensuring compliance with a comprehensive, authenticated, non-repudiable audit trail. Implemented a flexible indexed caching layer. Designed a dynamic rules engine. Abstracted data access improving maintainability by 80%. Introduced a comprehensive settings management framework.



PointyHat: Worked on an online theater production script editor and resource manager. Introduced a simple solution for unlimited undo and redo actions.



Klein Systems Group: Worked on ERP systems 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.



Vivonet: Refactored code processing millions of payment transactions per month. 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.



Pinpoint Information Systems: Implemented solutions for floor operations in automotive assembly plants. Led a feasibility study on new ultrasound localization algorithms and technology.



Worked on a Canadian Space Agency sub-contract for a robot simulation system.