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Hi!

I'm Julie Koubová

I'm a software developer based in Prague. My areas of expertise encompass a wide range of platforms and technologies: from creating beautiful and accessible web apps, to cloud back-end development, to low level C/C++ systems programming.

I tend to focus on human interfaces a lot; be it the end-user interface or API boundaries between components and teams, I strive to make them as intuitive and hard to break as possible.

I love teaching and mentoring others and seeing them grow.

Get the most recent version of this resume at https://juliekoubova.github.io/resume.

My Professional Experience

2019–present
Restfu
Independent

Started an open-source F# reimagination of some ideas first explored on the IOT project.

This ASP.NET Core framework enables quick implementation of CRUD REST APIs out of chains of simple, composable handlers dealing with various aspects of an API, like data storage, change notification, access control, DTO mapping, or specific business logic.

The framework focuses on providing great and accurate Swagger documentation for the APIs with minimum effort on the developer's part.

◯ https://github.com/juliekoubova/restfu/

2016–present
Industrial Internet of Things
IPS s.r.o.

Led a small group of developers implementing an Azure-based industrial IOT project. Architected both the .NET back-end and the Angular front-ends.

Implemented a fully configurable (SharePoint webpart-like) UI composed of widgets visualizing real-time data received via SignalR. Created a common UI component library implementing customer's visual identity using functional CSS approach.

Oversaw the development of a generic JSON filtering and mapping engine inspired by MongoDB query language. Created infrastructure for real-time processing, aggregation, storage and forwarding of the acquired telemetry.

2018–2019

Interactive 3D Machining Visualization

IPS s.r.o.

Inherited a prototype of an app that would animate 3D models of tools and work pieces recorded during a machining run; turned it into a modern, maintainable, server-rendered Angular application based on the NGXS state management library.

Later implemented playback of live data streamed over a web socket. Created a custom chart component using D3.js that was performant enough to scroll smoothly at 60 FPS. Developed a WebGL shader rendering thousands of arrows representing forces exerted by the tool at each point of its path.

2017

SharePoint Development Workshop

Independent

Ran a one-day workshop on modern client-based SharePoint development for a group of developers who only had experience with the server-based approach.

2016

HideConsoleOnClose

Independent

While working on an internal developer tool at IPS, created a Win32 library that keeps a console process running in the background when the user closes its window. Implemented using a DLL injected into the console host via a system hook and a helper x64 executable for apps running in WOW64.

⬡ https://github.com/juliekoubova/HideConsoleOnClose/

2015

HarshPoint

Independent

Created a SharePoint code-first provisioning framework based on lessons learned developing previous solutions at Trask and NESS.

⬡ https://github.com/HarshPoint/HarshPoint/

2014–2015

Dubai Airports Intranet

NESS Czech s.r.o.

Developed a SharePoint-based intranet with search, user profiles, content routing and approval workflow. Designed the solution's data architecture. Mentored junior team members. Communicated with web designers in India and implemented their designs.

2012–2014

SharePoint 2007 to 2013 Migration

Trask Solutions a.s.

Identified and fixed code incompatible with SharePoint 2013. Created new master pages and CSS according to the provided design. Developed PowerShell scripts to move data from the old farm to the new one via an intermediate 2010 installation.

2011–2012

Invoice Approval

Trask Solutions a.s.

Designed an invoice document model and approval workflow based on SharePoint 2010. Communicated with stakeholders and business analysts. Created stateful user interface using a custom ListFieldIterator.

2010–2011

Skoda Auto Content Management System

Trask Solutions a.s.

Maintained legacy applications. Designed a code-first framework for SharePoint object provisioning, which was then used to develop the next version of Skoda's CMS.

2002–2009

Presales Support, Consulting Services

Microsoft s.r.o.

Created proof-of-concept solutions and technology demonstrations for prospective enterprise customers.

Developed data transformation pipelines and user interface on several enterprise integration projects for government agencies.