CURRICULUM VITAE

Mika Haulo

NAME
Mika Haulo

TITLE
Senior Software Developer

LOCATION
Remote

BIO
I'm an experienced software developer who puts serious effort on writing clean and highly maintainable code.

I've been writing software professionally for the past 20 years, focusing mainly on web applications for the past few years. I'm currently specializing in Ruby and Ruby on Rails programming.

One of my strongest areas of expertise is designing software architectures and keeping them as clean as simple as possible and thus making them easy to maintain and develop further.
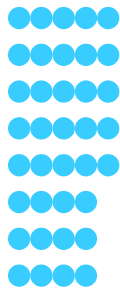
TOP TECHNICAL SKILLS

Ruby
Rails
C, C++, Qt
HTML
CSS, SCSS
JavaScript
Python
Django

CONTEXT SKILLS

Geospatial programming, GeoJSON
Online maps (raster, vector)
E-invoices, Finvoice
Online payments, Stripe
Single Sign On, OAuth, OIDC
Entrepreneurship
Remote working
GDPR, privacy
Audio & music technologies
Diabetes technology
Accessibility / A11Y
Writing articles in Finnish

CONTINUOUS PROJECTS

2020–present: Waxwing
A business management and invoicing tool for freelancers and other solo entrepreneur.

- Tech: Ruby on Rails, HTML5, SCSS, Stimulus, Stripe
- Client: Internal project for Laukka Solutions Oy

2013–present: Jälki.fi
Jälki is a tool for cyclists for creating and sharing the best cycling routes. In addition to the main application, I've built custom tools such as a route editor on top of Leaflet, and a couple of libraries for dealing with OpenStreetMap data.

- Tech: Ruby on Rails, HTML, SCSS, CoffeeScript, jQuery, Bootstrap, C, C++, Stimulus
- Client: Internal project for Laukka Solutions Oy

2012–present: Sokeriseuranta
A self-care tool for people with type 1 diabetes. Basically, a diabetes diary that allows users to log their blood gluocose levels, insulin doses, carb intake, and daily excerise time.

- Tech: Ruby on Rails, HTML, CSS, JavaScript, Bootstrap, Hotwire
- Client: Internal project for Laukka Solutions Oy

PROJECTS OVER THE PAST 10 YEARS

2024 Sploinx
A desktop application for sending and receiving MIDI SysEx data.

- Tech: C++, Qt, ALSA
- Client: [no client; a personal project]

2024 Unnamed text editor
A simple desktop application with minimal features for calm and distraction-free writing.

- Tech: C++, Qt
- Client: [no client; a personal project}

2024 Website project
I redesigned and implemented a new website for Nokian veneilijät ry.

- Tech: Ruby on Rails, Spina, HTML, CSS, JavaScript, Dokku
- Client: Nokian veneilijät ry

2024 Website and email consultation
An entrepreneur needed a new host for their website and email. I selected a new hosting platform and transferred emails and the website. I also improved the website's implementation and search engine optimization.

- Tech: HTML, email, SEO
- Client: [classified]

2021 – 2022 Ruby application development and consultation
A client had run into trouble when their original application programmer had left the company, and
the only programmer they had was a junio who was not able to continue development on their own.
The application turned out to be in very bad shape; it had several bugs and security issues, and
wasn't properly using features from Sinatra and Sequel. In addition to fixing bugs and security issues
I had found, I also changed the structure of the application so that writing test was in fact possible –
before these changes the application was not compatible with any Ruby testing framework out there.
I also wrote a bunch of tests which helped maintaining the integrity of the application.

- Ruby, Sinatra, Sequel, Rspec, Minitest
- Client: [classified]

2020 – 2024 Ruby on Rails API-only backend
A long-term client project. I was a part of the team who were programming a backend application
that was serving a couple of different web-based frontend applications and mobile applications for
Android and iOS.

- Tech: Ruby on Rails
- Client: [classified]

2020 – Various WordPress development and consultation projects
A lot of projects and task including bug fixing, website development, theme development, plugin
development, maintenance services, and training.

- Tech: PHP, WordPress, HTML, CSS, JavaScript
- Client: [Several]

2019 – Web application for building quizzes
I was hired to build a quiz tool for a campaign that aimed at improving knowledge about diabetes.
The quiz was aimed at stundent at Finnish compehensive schools.

- Tech: Ruby on Rails, HTML5, SCSS, Stimulus, Trix, Heroku
- Client: Diabetesliitto (Finnish Diabetes Association)

2019 – Backend stubbing as a frontend development aid
While waiting for the actual backend to be available by another team, I quicky crafted a fake
backend to keep frontend development going.

- Tech: Ruby, Sinatra

2019 – OAuth/OIDC authentication flow development in two different occasions
I implemented SSO authentication flow for two different projects. Both were web applications, but
with different technological design. One was a complete application built on Django, the other was a
Vue.js frontend.

- Tech: Django, Python, JavaScript, Vue.js
- Client: [2 x Classified]

2018–2019 – Development of an asset management software
A tracking and management software for assets that circulate in different locations (client premises,
storage, laundry etc.). I was developing new features and fixing bugs.

- Tech: Python, Django, HTML, CSS
- Client: [Classified]

2018 – Development environment improvement
The client had several projects which were unnecessary complicated to set up. I evaluated the situation and developed a better environment on top of Vagrant. With a colleague we also refactored some of the software to make things more fluent. The original time to set up a development environment from scracth was at least couple of hours, but with the new setup could be reset several times a day with minimal effort, thus making the overall development more efficient.

- Tech: Vagrant, Virtualbox, Python, Django.
- Client: [Classified]

2018 – Azure message queue client
I wrote a script that fetched data from an Azure message queue and transformed and stored it another format.

- Tech: Ruby, Azure
- Client: [Classified, operating in financial tech]

2018 – MQTT/AMQP message bridge
I wrote a program that fetched data from Azure and posted it to another web API, thus acting as a bridge between these two services.

- Tech: C
- Client: [Classified]

2018 – Porting a C# application to Python
A legacy C# application needed to be rewritten in Python. The biggest challenge was that there was practically no documentation or code comments, and nobody seemed to know what the application was actually supposed to be doing. This ended up being a sort of reverse engineering project; we had a data set we could run through the originall application and record its output – when the new application produced similar results, we knew it was done corretcly.

- Tech: C#, Python
- Client: [Classified]

2017–2019 – Geospatial research projects
Several R&D projects about researching and building mapping and geospatial tools.

- Tech: Ruby on Rails, HTML, SCSS, C, C++, Python, REST APIs
- Client: Internal project for Laukka Solutions Oy

2015 – A self-assessment web tool
A web application that present claims with simple yes/no answers. The purpose of the tool is to provide a self-assessment test for users for testing their diabetes management skills. An important design decision was to let users be as anonymous as possible and avoid collecting information about how people answered.

- Tech: Ruby on Rails, HTML, SCSS, CoffeeScript, Backbone.js, Bootstrap, Heroku
- Client: Diabetesliitto (Finnish Diabetes Association)

2014–2017 – Various WordPress development and consultation projects
A lot of projects and task including bug fixing, website development, theme development, plugin development, maintenance services, and training.

- Tech: PHP, WordPress, HTML, CSS, JavaScript
- Client: [Several]

2013 – Demoinbox
This was the first in-house application for my own company. The purpose was to make an application for music publishers that helped them to process demo songs sent to them.

- Tech: Ruby on Rails, HTML, SCSS, CoffeeScript, jQuery, Bootstrap
- Client: Internal project for Laukka Solutions Oy

2012–2014 – One DJ
I was a part of the development team who made a DJ application "One". My main duty was to work on main application logic, while others focused on UI design/programmin and underlying low-level features.

- Tech: C++, Qt, QML
- Client: EKS / Audio Artery

FRONTEND DEVELOPMENT

Skill	Level 1-5	Time Used	Last Used
HTML, (S)CSS, JavaScript	5	20+ years	2021
jQuery	5	5 years	2020
Bootstrap	5	5 years	2020
Stimulus & Turbolinks (& Hotwire)	4	2 years	2021
jBuilder (json template tool)	4	1 year	2021
ERB (template language)	5	15+ years	2021

BACKEND DEVELOPMENT

Skill	Level 1-5	Time Used	Last Used
Ruby on Rails	5	15 years	2021
Sinatra (Ruby)	4	1 year	2019
Jekyll	4	2 years	2020
C, C++	4	10+ years	2019
Message queues (RabbitMQ)	3	2 years	2019
PHP	4	5 years	2020
WordPress	4	4 years	2020

SERVER, CLOUD, INFRASTRUCTURE

Skill	Level 1-5	Time Used	Last Used
Docker	4	2 years	2021
AWS (EC2, S3, Opsworx)	3	2 years	2019
Linux Servers (Nginx, Apache, Postfix, etc)	5	20+ years	2021
Linode	4	5 years	2021
Heroku	4	5+ years	2020
Memcached	3	1 year	2020
Redis	3	1 year	2020
Dokku	3	A few weeks	2021

BUILD, TEST & TOOLS

Skill	Level 1-5	Time Used	Last Used
Git	5	10+ years	2020
Bitbucket	4	5+ years	2020
Jira / Confluence	2	3+ years	2019
Jenkins	3	2 years	2019
GitHub	4	5+ years	2020
GitLab	3	1 year	2019