Evan Roman

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Relevant Experience

May 2022 - Current
Developer, *Loikka*, Turku, Finland
I worked on a team developing a SaaS for management of subscriptions, specifically for management of insurance policies and claims. I currently maintain and develop projects for multiple clients. All projects run on Google Kubernetes Engine and use other Google Cloud services.
- Implement CI pipelines in self-hosted Gitlab for QA, testing, and deployment to Google Kuberenetes Engine with Helm and Pulumi
- Create and maintain ETL pipelines that run as Kubernetes' Jobs
- Develop collaborative realtime web applications using websockets, Yjs, and Redis PubSub.
- Develop front-end application in TypeScript with React and Next.js.
- Develop back-end APIs with Typescript that run on Node.js. Usually using Express.js or Fastify.
- Use a variety of data sources and databaes in various projects, often ArangoDB and BigQuery.

October 2023 - December 2023
Teaching Assistant, *Åbo Akademi University*, Turku, Finland
I gave lectures for a masters course in Computer Engineering

May 2021 - September 2021
Developer, *Digital Onboarding*, Boston, MA
I worked on a team improving a marketing tool for banks and credit unions.
- Developed back-end API in Elixir using Phoenix and Ecto with PostgreSQL
- Developed front-end SPA in React and Redux

December 2018 - July 2019
Senior Developer, *New York, NY*, SAM
I was the technical co-founder to a startup. The project went on hiatus indefinitely due to cofounders (including myself) having other obligations.
- Designed API with founders in OpenAPI on Swagger
- Developed front-end for SPA in React and back-end in Django
- Created DevOps system with Docker and provisioned on AWS

January 2017 - January 2018
University Lecturer, *Tallinn University of Technology*, Tallinn, Estonia
I taught "Fundamentals of Python" and "Advanced Python" to bachelors students
- Tested students ability to use primitive data types, Lists, and Dictionaries using a file with three unit tests
- Gave lectures and excercises on python features including concurrency with threads and asyncio, decorators, iterators, generators, and comprehensions
- Created challenges and aided students with popular libraries, like Django, Flask, NumPy, Pandas, Request, and Scikit-learn

October 2015 - February 2017 **Lead Developer**, *Like A Local Guide*, Tallinn, Estonia

I took full responsibility for the maintenance and development of "likealocalguide.com". I furthered the company's vision of the project, evolving the website to a more social platform. As the main steward of the project, I lead other developers who also worked on the project.

- Implemented Sales Funnels from Google Analytics, finding what steps users got lost when booking tours and adding content
- Extracted, Transformed, and Loaded (ETL) over 100,000 cities from GeoNames, while deduplicating matching the cities from GeoNames to our existing cities
- Migrated deployment from Archlinux to CentOS
- Increased site speed on pages by caching expensive operation results with redis and query optimization with PostgreSQL
- Maintained CentOS server and CentOS Vagrant development environment
- Scaled product by adding PgBouncer, upgrading server hardware, and appropriately tuning number of worker processes to new hardware
- Implemented designs and features on the front-end with SASS and jQuery and on the back-end with Django
- Interviewed and managed other developers working on the project

2015 **Developer**, *Cakebet*, San Francisco

I contracted as a developer for a Bitcoin casino.

- Built a currency converter for covering most fiat and numerous cryptocurrencies, that could update at a very high frequency (<3 seconds)

Education

September 2021 - June 2023 **MS Computer Science**, *Åbo Akademi University*, Turku, Finland

- Received full tuition merit scholarship
- Thesis: *Performance of Special-Interest Voting Advice Applications in the 2023 Finnish Parliamentary Election*. https://www.doria.fi/handle/10024/187299

May 2018 - March 2020 **BA Mathematics**, *Thomas Edison State University*, Trenton, New Jersey

Bachelor's project: *Explaining Black Boxes: Interpretable Machine Learning*. GPA 3.8/4.0

Skills

Programming Languages: Python, JavaScript (ES5, ES6, TypeScript), Elixir, Rust, Shell (Posix, bash), Emacs Lisp, Matlab/Octave, R.

Frameworks & Libraries: React, Next.js, Yjs, Phoenix, Ecto, JQuery, Django, Flask, Fastify, Express.js, Pandas, Numpy, Sparklyr, D3.js.

Document Languages: HTML, Markdown, reStructuredText, LaTeX, OpenAPI (swagger).

Databases: PostgreSQL, MySQL, SQLite, Redis, BigQuery, MongoDB, Apache Spark, ArangoDB.

Deployment Environments: Google Cloud, Amazon Web Services, Kubernetes, Docker, Docker Compose, RHEL (CentOS), Vagrant, Cloudflare Serverless.

Projects and Open Source

Grid Validator, *https://evrom.github.io/grid/*

Validates, previews, and helps debug `grid-template-areas` CSS property values.

- Built Grid Validator with TypeScript and React
- https://github.com/evrom/grid-validator

Stylelint, *https://github.com/stylelint/stylelint/*

Added a new validation rule to Stylelint

- Validates `named-grid-areas-no-invalid` to meet W3C specifications
- Give useful error messages to find where in the template string there is non-congtiguous or non-rectangular values
- https://github.com/stylelint/stylelint/pull/5167

Hurst, *https://crates.io/crates/hurst*

Calculates estimated Hurst exponent on time series data.

- Published WebAssembly package on NPM
- Written in Rust
- https://github.com/evrom/hurst

Hurst Exponent, *https://evrom.github.io/hurst-exponent/*

View estimated Hurst exponent of time series data.

- Built with TypeScript, React, and D3.js
- Uses Hurst compiled to WebAssembly.
- https://github.com/evrom/hurst

This Resume, *https://github.com/evrom/resume*

View the source of this resume in LaTeX.