

James Lavin

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JamesLavin at Github & Gitlab



[Youtube.com/@elixirzone6902/videos](https://www.youtube.com/@elixirzone6902/videos)

EXPERIENCE

Elixir developer, Kubernetes admin, economics PhD, data analyst, & team lead: • [Elixir](#), [Phoenix](#), [OTP](#), [LiveView](#), [Livebook](#), [Nx/Explorer/Scholar/Axon/Bumblebee](#) • [PostgreSQL](#) • [Kubernetes](#) • [Helm](#) • [Cilium](#) • [Podman/Docker](#) • [CRI-O](#) • [Cert-Manager](#) • Linux servers & workstations • Data analysis & statistics • [R](#) • [CloudNative PG](#) • JavaScript • [Typescript](#) • [Svelte](#) • Sharing ideas with other devs • Encouraging diverse, collaborative, supportive, entrepreneurial, user-focused teams that design/build/test thoughtfully, learn continually, and sustainably deliver value • Evolving scalable, reliable, fault-tolerant, maintainable systems, ideally with functional/reactive, event-driven, message-based microservices (e.g., [Kafka](#)), solid regression testing, readable code, monitoring, tracing, logging,DDD, CI/CD, and infrastructure as code (e.g., [Ansible](#) & [Terraform](#))

Mar 2025 – Present *[Sabbatical, Studying & Hacking](#)*

- Built <https://www.GuessTheUS.com> to learn Python & AI and educate/inspire positive change
- (Re)learned JavaScript, [Typescript](#), [Svelte](#), [DOM scripting](#), [Web APIs](#), [browser extensions](#), etc. to extend browser extension I built for a stealth project
- Built NVIDIA RTX 4070 Ti Super Fedora desktop on which I run [Ollama](#) to test local LLMs.
- Built Elixir program to get/update Hexdocs: https://github.com/JamesLavin/local_hexdocs

Jul 2023 – Mar 2025 *[Screenverse, Principal Software Engineer \(Elixir\)](#)*

- Doubled revenue per screen by building system that ingests bids data in near-realtime and dynamically adjusts bid floors to maximize (probability-of-winning) * (profit-per-winning-bid)
- Built many other data ingestion and analytics features

Oct 2019 – Jul 2023 *[TD Securities, Team Lead \(Elixir & DevOps\)](#)*

- Built multiple new services using Phoenix, LiveView, Ecto, PostgreSQL, and OTP.
- Inherited homegrown, mission-critical Kubernetes-like platform built with dense, untested, poorly documented Elixir code running across hodgepodge of Windows environments and kept the trains running on time while improving observability and reliability and adding features.
- Mentor, train, & motivate team to learn/grow individually and create clean, extensible code.
- Improved documentation & testing, intra-team collaboration, and inter-team communication.

Nov 2018 - Aug 2019 (mass layoff) *[CareDox, Senior Developer \(Elixir/GraphQL/Phoenix\)](#)*

- Helped design & build several new database-backed Elixir backend services for web services, data analytics, and asynchronous job processing
- Convinced team to use event sourcing, DDD, and CQRS to create next-generation electronic health record. Built prototype with Commanded + GraphQL, proving feasibility. Taught team.
- Trained, mentored, and reviewed code written by developers learning Elixir

Mar 2015 - Oct 2018 *[Teladoc Health, Senior Developer \(Ruby/Rails & Elixir/OTP/Phoenix\)](#)*

- Architect & lead backend developer of Medication Service – built as an Elixir umbrella project – which lets the doctor see their patient's medication history (pharmacy fills & insurance claims) and prescribe medications with knowledge of the patient's insurance plan's drug coverage, copays, preferred alternatives, prescribing rules, etc. Presented at EMPEX 2018: <https://www.youtube.com/watch?v=CUvif-levqk>

- Received “Outstanding Achievement” trophy & \$500 prize from CEO, July 2017
- Built many features in Ruby/Rails, including AARP project & integration with Analyte Health
- Gave internal talks on Elm, Kafka, event sourcing, CQRS, DDD, the saga pattern, Docker, optimizing tech debt, and machine learning, AI, & healthcare applications.

Apr 2013 - Mar 2015 [Hedgeye.com, Developer \(Ruby/Rails\)](#)

- Developed many features with Ruby/Rails and Elasticsearch/ELK stack
- Empowered Excel-based researchers with Python/Pandas/Matplotlib/ScikitLearn infrastructure

Early 2012 - Early 2013 [AmicusHQ & Stylitics, Developer \(Ruby/Rails\)](#)

2005 - 2011 [PowerMandarin.com, Developer \(Ruby/Rails & Javascript/JQuery\)](#)

As stay-at-home dad, learned Rails, Javascript, JQuery, & R. Built free website for learning Chinese with pop-up definitions, text/audio/video content, & automated word lists personalized per user/article. Wrote unfinished books, including [RaisingMatureKids.com](#) and *Scamocracy*.

2003 - 2005 [PatriotsBook.com, Author & Developer \(PHP\)](#)

Wrote *Management Secrets of the New England Patriots*, Vols 1 & 2 and built marketing/sales website.

1999 - 2003 [Perfect.com, MeetChina.com, and OptimalHome.com \(my startup\)](#)

Fell in love with tech as product manager & database architect/administrator

EDUCATION

Stanford University: Ph.D., Economics
M.A., East Asian Studies

London School of Economics: M.Sc., Economics

Harvard University: A.B. (*magna cum laude*), Government

LIFE-LONG LEARNER

- Built <https://nutrition.discovery.zone/> and <https://www.exercise.zone> using Phoenix & Elixir metaprogramming, which lets me create similar sites with little extra coding.
- Run high-availability [Kubernetes](#) cluster with 3 control-plane nodes and 6 worker nodes, [Cilium](#), [cert-manager](#), and [CRI-O](#), fronted by a [HAProxy](#) load balancer. My K8s API service is fronted by a virtual IP using [keepalived](#). Run software including [Wiki.js](#) and [Wekan](#).
- Own hundreds of tech books and watch countless tech videos. Youtube addict.
- Created useful Elixir test library: https://github.com/JamesLavin/recursive_selective_match
- Enjoy studying & coding nights, weekends, and "vacation" days. Side projects have involved [a browser extension](#), JavaScript, [Svelte](#), [LiveView](#), [Burrito](#), [R](#), and [RabbitMQ](#).
- Maintain popular list of tech resources: https://github.com/JamesLavin/my_tech_resources
- Created [my “Elixir Zone” Youtube channel](#) to share my love of Erlang & Elixir
- Strong knowledge of SQL, database indexing, etc. Designed/administered databases. Wrote stored procedures. Teladoc’s Lead DBA joked he was reporting me to the DBA guild after I identified missing indexes too frequently.
- Built/administered Linux servers, VPSes, & laptops for 25 years. (Currently: Debian & Fedora)
- Listen (at 2x – 3x speed) to tech & business/management/entrepreneurship podcasts and roughly a book a week on Audible/Overdrive/Libby/Hoopla while exercising, doing chores, etc.
- Received fellowships for all of graduate school (plus post-Ph.D. advanced Chinese at Tsinghua ([iupchinesecenter.org](#)), which I declined after the U.S. bombed China’s Yugoslavian embassy)