# JAMES LAVIN

57 Holly Rd, New Canaan, CT 06840

www.JamesLavin.com (blog)
@JamesKLavin & mstdn.io/@lavin
650.269.3492

James@JamesLavin.com Github.com/JamesLavin Youtube.com/@elixirzone6902/videos

#### **EXPERIENCE**

Elixir developer, team lead, and manager: I enjoy: ● Elixir, Phoenix, OTP, LiveView, Nx, Nerves, etc.

• Kubernetes & Podman • Linux servers • PostgreSQL & databases • Data analysis • Mentoring, training, & motivating developers • Helping develop 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, solid testing, monitoring, tracing, logging, domain-driven design, CI/CD, and infrastructure as code

# Oct 2019 - Present <u>TD Securities, Team Lead (Elixir & DevOps)</u>

- 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) <u>CareDox, Senior Developer (Elixir/GraphQL/Phoenix)</u>

- 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:
   <a href="https://www.youtube.com/watch?v=CUvif-levqk">https://www.youtube.com/watch?v=CUvif-levqk</a>
- 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 <u>Hedgeye.com, Developer (Ruby/Rails)</u>

- Developed many Ruby/Rails features
- Built Elasticsearch servers and implemented the ELK stack & website search
- Introduced Excel-based researchers to the Python/Pandas/Matplotlib/ScikitLearn ecosystem

Early 2012 - Early 2013 AmicusHQ & Stylitics, Developer (Ruby/Rails)

2005 - 2011 <u>PowerMandarin.com, Developer (Ruby/Rails & Javascript/JQuery)</u>

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 <u>PatriotsBook.com, Author & Developer (PHP)</u>

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

1999 - 2003 <u>Perfect.com, MeetChina.com, and OptimalHome.com (my startup)</u>

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

- Own hundreds of tech books... many but not all of which I've actually read.
- Watch countless tech videos. Youtube Premium addict.
- Enjoy studying & coding nights, weekends, and "vacation" days. Current side projects involve a browser plugin, JavaScript, Svelte, LiveView, Kubernetes, Burrito, and RabbitMQ.
- 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.

#### OTHER

- Maintain popular list of tech resources: <a href="https://github.com/JamesLavin/my">https://github.com/JamesLavin/my</a> tech resources
- Created my "Elixir Zone" Youtube channel to share my love of Erlang & Elixir: Youtube.com/@elixirzone6902
- Regularly power walk, jog, cycle, and (pre-pandemic) played squash
- Built <a href="https://nutrition.discovery.zone/">https://www.exercise.zone</a> using Elixir metaprogramming, which should let me spin up similar sites with little extra coding.
- Created useful Elixir test library, <a href="https://github.com/JamesLavin/recursive selective match">https://github.com/JamesLavin/recursive selective match</a>.
- Run my own Kubernetes cluster.
- Strong knowledge of SQL, database indexing, etc. Have designed and administered databases and written stored procedures. Teladoc's Lead DBA once joked he was reporting me to the DBA guild after I identified missing indexes a few too many times.
- Solid Linux knowledge. I've run Linux on servers, VPSes, and laptops for 20 years. Now in rootless containers... thanks, Podman!
- Passion for modularity, simplicity, reliable regression tests, readable, clean code, and exciting others about developer sanity practices.
- Devoting 15-30 minutes a day to piano for the rest of my life: https://www.jameslavin.com/post/2023-06-09-never-stop-learning-slowly/
- Received fellowships for all of graduate school (plus post-Ph.D. advanced Chinese at Tsinghua (<u>iupchinesecenter.org</u>), which I declined after the U.S. bombed China's Yugoslavian embassy)