Orion Kindel



About

Flexible, passionate and experienced; Orion is a powerful force multiplier with 7 years' experience as a software engineer & player-coach.

Skills

Javascript, HTML, CSS

Expert · 8 years

Deep understanding of runtime semantics, exception handling, performance characteristics and tooling.

Architected & implemented complex production interfaces in React, as well as angular, vue and svelte. Deep experience using hooks & functional components to manage state and complexity as the product scales.

Guided teams to best practices, building systems with 3-40 active contributors handling 1MM requests / second with %99.999 uptime

Open-Source (Javascript / Typescript)

• fetch

Rust-inspired structural pattern matching in JS, reducing code footprint and increasing expressiveness for thousands of repositories

• fp-ts (Contributor)

Open-Source (Purescript)

• node-stream-pipes, csv-stream, cbor-stream, postgresql

Compat layer between pipes and the Node standard library, lifting the UNIX-pipe inspired library to purely functional feature parity with actual UNIX pipes.

postgresql

High-level interface to libpq from purescript, supporting complex queries and streaming with COPY .. TO .. and COPY .. FROM ..

- fetch HTTP client library built on fetch
- url-immutable Immutable bindings to NodeJS URL API
- node-workers Low-level bindings to NodeJS Worker API
- cheerio

Idiomatic wrapper of cheerio, an in-memory platform-agnostic in-memory DOM parser

• sync

Purescript implementation of rust's thread-safe synchronization primitives (Mutex, RwLock) adding exclusivity guarantees to concurrently accesssed effectful resources.

Professional Experience

- At Thunderstrike, built MVP in React-inspired web framework and several service-oriented backend applications in Purescript. Demonstrated problem statement, early functionality and communicated value proposition to customers and investors. Resulted in over \$100K in total contract value and an pre-seed raise that was in progress of \$1M at a \$5M cap (interrupted by co-founder leaving)
- At Qwick, built 4 separate user interfaces spanning all business verticals using FRP React in ReasonML. Was responsible for implementing best practices, architecting solutions and managing tech debt. Result was the company growing to over \$10M

MRR with tens of thousands of customers, and frontend codebases that were highly maintainable despite being complex.

- At TheoremOne, successfully built several highly maintainable user interfaces using React.
 - iMercata · Managed team of 4 engineers working on MVP-stage UI for client company. · Was responsible for providing technical vision, coaching and implementing best practices. The client's vision was implemented quickly and effectively by the team, resulting in a successful relationship and interaction with the client company.
 - GitHub Managed team of 2 engineers working on UI and API for GitHub. Was responsible for providing technical vision, coaching and implementing best practices. The client's vision was implemented quickly and effectively, resulting in a continued relationship between GitHub & TheoremOne.
- At StrongMind, built mobile app for students to take assessments, interact with their course performance & attendance using React Native.

Linux

Very Strong · 6 years

- Use Docker & Kubernetes to deploy high-availability distributed systems at scale. As someone passionate about predictability & determinism, I've used containerization to great effect, increasing velocity and uptime on every team I've been a part of.
- Regularly host virtual TV & movie watch parties with friends using on-the-fly encoding with ffmpeg to a custom cloud-hosted RTMP + MPEG/DASH server.
- Deep understanding of public & private network management, routing traffic on public network interfaces to applications running on local interfaces. Have encountered and debugged issues at NAT & DHCP layers, manage SSL certificates issued by TAs, manage DNS and mDNS configuration, and have implemented an application-layer networking runtime from RFC (CoAP).
- Manage synthetic video devices and hardware drivers at the kernel-module level.
- Use user-space utilities for an extremely productive and universal workflow, ex.
 - kakoune (preferred), (neo)vim, nano
 - remote machine access (ssh, sshfs, rsync, xpra)
 - advanced shell scripting (xargs, sed, gawk, gzip, ffmpeg, sub-shells, fork, heredoc)
 - package management (apk, apt, pacman, dpkg)
 - per-project tooling management (asdf, nvm, virtualenv, pipenv)

Rust

Very Strong · 6 years

An early adopter of Rust and passionate advocate. I've been an active OSS & rust discord community member for years and am a proud organizer of Chicago's Rust Meetup. Rust's type system, high level language features, developer experience, and runtime characteristics make it the easy choice for any mission-critical or performance-critical system in my eyes.

Open-Source

slack-blocks

Idiomatic API to programatically create composable Slack messages

• naan

Abusing the type system for fun & profit. std -toolchain implementation of higher-kinded types and Haskell-esque typeclasses.

• toad

No-std and no-alloc implementation of RFC7252 **Co**nstrained **A**pplication **P**rotocol. A low-latency RESTful networking runtime alternative to HTTP built on UDP with reliable message transmission, SSL, and built-in pub/sub semantics. Sub-packages:

• toad-array

trait abstracting Vec 's API for any in-memory contiguous collections. Allows to ad to simultaneously support systems with & without heap allocation.

- toad-map same as above, but for HashMap
- toad-string same as above, but for Strings

- toad-jni
 A rethinking of Java Native Interface (JNI) interaction in Rust.
- toad-stem no-std implementation
- toad-cursor
 no-std port of Cursor
- toad-writable no-std port of Read & Write traits

Professional Experience

- At StrongMind, architected & built data pipeline ingesting 100K messages from disparate systems into a data warehouse. This led directly to higher business performance as centralized OLAP workflows empowered better data-driven decisionmaking. Led & trained team of 5 with no prior Rust experience and ICs were productive in it alarmingly fast!
- At Qwick, architected & built distributed event-driven system to reduce database load and increase uptime.
- At Thunderstrike, architected & built novel general-purpose distributed web scraper to ingest public information on the web en masse.

CICD & Automation

Very Strong · 7 years

Have spearheaded adoption of bleeding-edge automation practices, implementing end to end test suites and continuous delivery pipelines.

At StrongMind, saw dev team velocity increase by 60%.

At Qwick, saw dev team velocity increase by 30% as automation replaced manual QA testing and release strategies.

SQL

Very Strong · 7 years

Very comfortable designing physical schemas for high performance, optimizing indexes for common access patterns, and using RLS for securing data.

Have used many strategies to integrate relational databases with dynamic and strongly-typed business logic layers from highlymanaged ORMs (ex. Flask, Entity Framework, PrismaJS) to mini-ORMs.

Player-Coach

Strong · 6 years

Have managed teams of sizes 3-10 as a team lead (player-coach), accountable for success of individual team members as well as the team. Able to consistenly make & meet data-driven commitments, develop and maintain excellent relationships with team members and stakeholders based on accountability, candor and transparency.

Use tools like CICD, Scrum, TDD and pair programming to increase team velocity without applying pressure to individual team members.

Use frequent touchpoints with team members and a shared understanding of my expectations and their goals, decomposing them into measurable actionable steps and holding them accountable.

Other Skills

Expert **** Very Strong **** Strong ***

AWS		A A A A HATEOAS	
🛨 🛨 Figma	The stack API	★★★★ OSS Mgmt	🚖 🚖 🚖 OAuth, OIDC
🚖 🚖 🚖 Python	★ 🛧 🛧 Scala	★ 🛧 🛧 Java	🚖 🚖 🚖 OCaml
★★★★ C#	★ 🛧 🛧 Java	★★★★ GraphQL	🚖 🚖 🚖 NoSQL
★★★★ Data Insights	★★★★ Machine Learning	★★★★ ffmpeg	🚖 🚖 🚖 Cryptography
★★★★ WebAssembly	\star 🛧 🛧 Terraform	★★★★ gRPC	

Experience

thunderstrike.ai Technical Founder & CTO

2023 - Present

- Built product MVP in Purescript & Rust in 4mo fully covered by automated testing, automated deployments, load testing @ 100K messages / second yields <100ms latency
- With CEO have signed over \$100K in contract value with customers since foundation in October
- Perform competitor analysis, user interviews, and develop KPIs to continuously refresh our understanding of the problem we're solving pivoting when necessary.
- Maintain living backlog in JIRA* for transparency and accountability
- Manage 2 junior engineers, placed directly from bootcamp graduation 2mo ago who are now formidable and productive in Rust and Purescript.
- Develop and manage local Chicago tech community presence both for networking and startup representation.

Qwick Senior Software Engineer

2021 - 2023

- · Overhauled onboarding process, helping accelerate new junior hires
- Architected invoicing system to handle \$500K MRR with near-zero downtime
- Oversaw team of 4 junior engineers & 1 senior engineer executing on invoicing system. Was responsible for individual & team outcomes.
- Led initiative to decouple and modularize existing monolithic architecture, transforming into a services model with several event-driven components, adding independent deployability and automated testing. This increased developer velocity by 40%, reliability up from %99.9 to %99.999 in 6mo
- Led agile & scrum transformation with CTO, contributing to velocity increase of 40%
- · Led DevSecOps team, adding automated testing, CICD, system rearchitecture, documentation, DX improvements
- Mentored product managers helping them relax into a role of vision and user-advocacy, allowing dev teams to execute on wellstructured problem statements
- Led Google Design Sprints to quickly define and validate new product initiatives, introducing data-driven and qualitative user research
- · Organized grassroots presentations, helped team members develop and present their own topics

TheoremOne

Senior Lead Software Engineer

2020 - 2021

- Architected robust systems on AWS in Python, Ruby, React, Typescript
- Developed excellent relationships with stakeholders, communicating clear and frequent progress updates via demos, gathering feedback and requirements
- Managed 2 teams of 5-6, overhauling process increasing velocity by 30-40%.

Software Engineering Manager

2021

- Onboarded new Client Coordinator & Product Manager
- Managed team of 4 full-stack engineers, 1 QA, 1 GIS engineer working on seed-stage MVP
- Negotiated deadlines and rebuilt damaged trust with client

Product Manager

2021

- Owned living backlog with aggressive culling of speculative epics and stories so as to reduce noise and keep meaningful
- Communicated frequently with client to continually adjust forecasts, refine backlog and improve understanding of requirements
- Held dev team accountable for refining tickets into tasks and having implementation discussions with 1-2 sprint lead time.
- Ensured prior to Planning, tickets had accurate estimates, subtasks, and had been seen and touched by everyone who could execute on it, making it a 15min ceremony.

Strongmind Software Engineer

2017 - 2020

- Architected & executed on robust production systems in .NET, JS, TS, Python & Rust on AWS & Azure. Several greenfield and legacy projects incl. complex distributed systems, OLAP data pipeline, data warehouse, mobile app development and learning management system (Canvas LMS) integration.
- Led several team process transformations, using process changes and product vision improvements to increase team velocity and happiness.
- Led adoption of new technical practices, improving maintainability and velcoity. Ex. transitioning from TFVC to git, automating deployment and UAT, containerizing products, introducing automated testing.
- Mentored several junior engineers, led 2 teams developing production systems that are still used with few changes today.

Education

Associate's of Science, Physics

Scottsdale Community College, 2014 - 2016

Certified Scrum Developer

Scrum Alliance, 2019

Certified Scrum Product Owner

Scrum Alliance, 2020