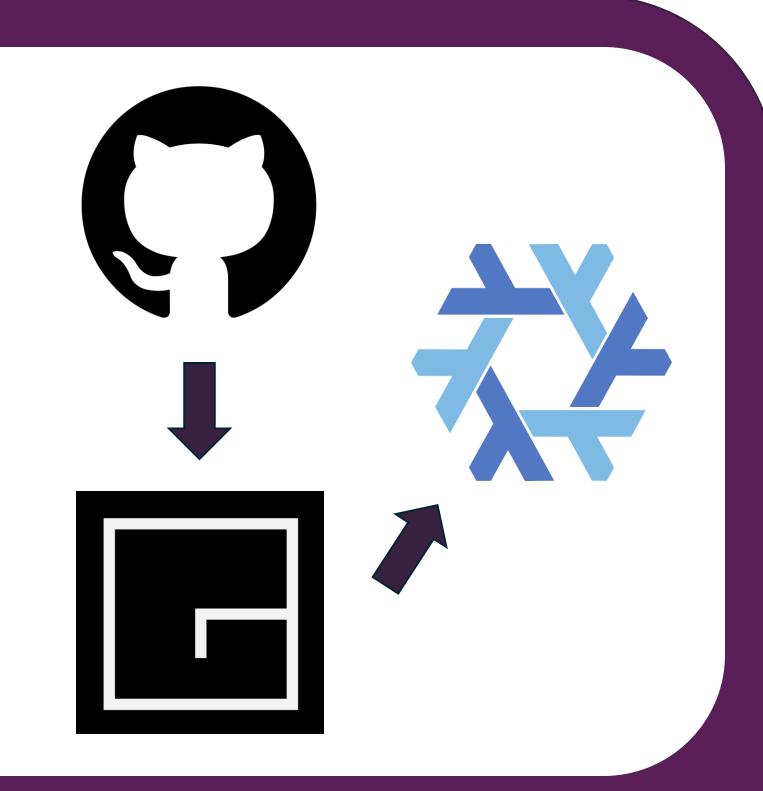
## Gave-Gator RSS Gus Johannesen, Chris Ross, Ellis Weaver-Kreider, Yanxi Wei

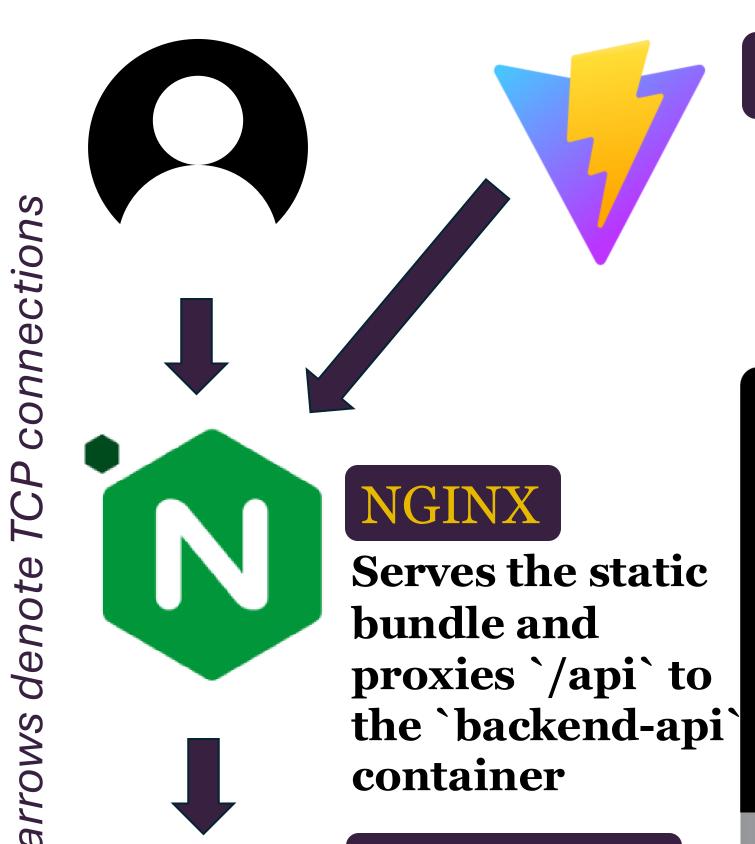




CI with Garnix

Our GitHub repository connects to Garnix CI, which automatically builds and tests using Nix expressions. Nix allows us to define tests and checks that are run hermetically in the same way builds are, ensuring they are not affected by user-specific configuration. This means that we as developers can easily run our CI checks locally. Nix's caching only rebuilds components affected by code changes, accelerating the CI process. When code deployment reaches our branch, Garnix automatically builds and deploys containers to our NixOS server.

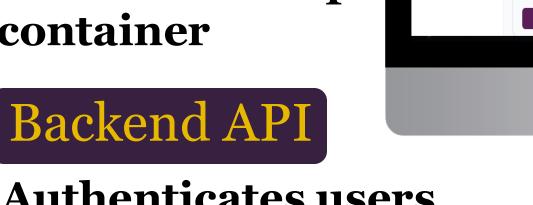
Aggre-Gator RSS is a feed aggregator that centralizes content from multiple web sources in one convenient location. Users can subscribe to their favorite websites and receive real-time updates. Built with WCU's purple and gold theme, Aggre-Gator RSS features a minimalist interface developed using TypeScript and styled with Tailwind CSS for a clean and straightforward UX design.



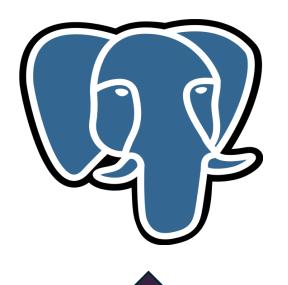
Compiles our Typescript, treeshakes the code, and optimizes our static assets, resulting in static files we can serve with **Nginx** 



Serves the static bundle and proxies \( /api \) to the `backend-api` container



**Authenticates users** and provides a **REST API to access** the articles and other data stored in the database

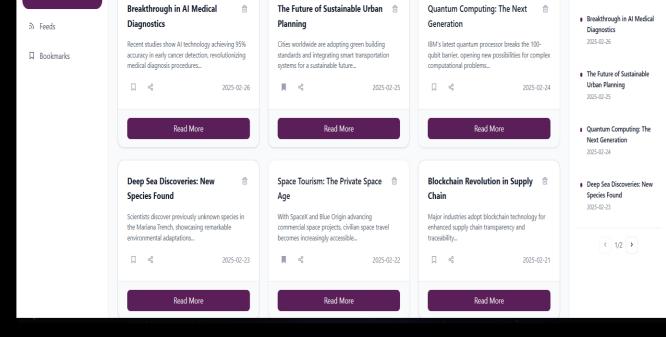


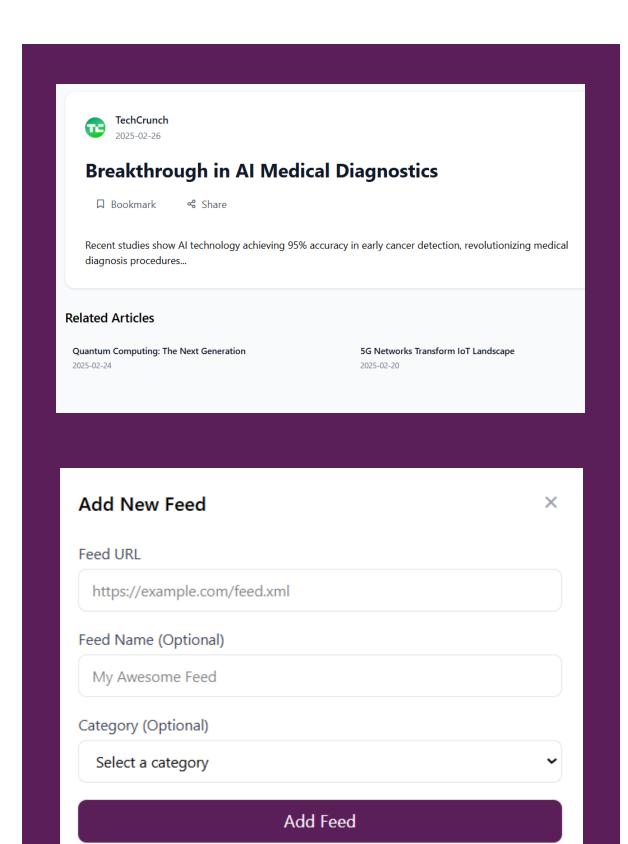
## PostgreSQL

Stores articles, feeds, and extra data needed for user authentication



**Periodically fetches** each feed, parses the XML, and updates the database with any new articles





## Deployment with NixOS

We use Nix instead of Docker to build our container images because of its focus on reproducibility and integration with NixOS. Our application components are defined declaratively in our flake.nix, allowing our NixOS server to manage container networking, volumes, and dependencies automatically. This declarative approach enables us to version control our entire runtime environment, not just application code, eliminating configuration drift between environments.

