

DORIAN PORTILLO

San Bernardino, CA | wheresdorian@gmail.com | dorianportillo.dev | github.com/slugb0t

SUMMARY

Software Developer / Research Software Engineer building open-source tools for FAIR data, biomedical research infrastructure, scientific metadata, and researcher automation. Experienced across TypeScript, Vue/Nuxt, React/Next.js, Python, Electron, Flask, Prisma/PostgreSQL, REST APIs, GitHub Actions, Docker, Vercel, technical documentation, and deployment pipelines. Public work spans FAIR software compliance, scientific poster publishing, metadata extraction, dataset publication, and desktop data-curation workflows.

SKILLS

Languages: TypeScript, JavaScript, Python, SQL, C++, Solidity, HTML, CSS

Frontend: Vue, Nuxt, React, Next.js, Tailwind CSS, Chakra UI, VitePress, Docusaurus, responsive UI development

Backend / Data: Flask, REST APIs, Prisma, PostgreSQL, MySQL, MongoDB, SQLite, JSON, metadata schemas, web scraping

Tools / Platforms: Electron, Node.js, Git, GitHub Actions, Vercel, Docker, Figma, CI/CD, linting/formatting workflows

Domains: FAIR data principles, research software, biomedical data curation, scientific metadata, open-source documentation

EXPERIENCE

Software Developer | Fair Data Innovations Hub | San Diego, CA

- Develop open-source research software and scientific web platforms that make software, posters, and datasets easier to publish, cite, validate, discover, and reuse.
- Contribute to Codefair, Posters.science, fairdataihub.org, SODA for SPARC, developer documentation, and metadata/schema tooling across public FairDataIHUB repositories.
- Build production interfaces and workflows with Vue/Nuxt, React/Next.js, TypeScript, Tailwind CSS, Prisma/PostgreSQL, REST integrations, GitHub Actions, Docker, and Vercel deployments.
- Improve Posters.science through UI updates, ORCID validation, AI-ready metadata workflows, documentation links, staging fixes, quality-of-life polish, and release support.
- Support Codefair, a GitHub-integrated assistant for FAIR/reusable research software, across TypeScript app code, testing, developer docs, deployment practices, and sustainability work.
- Create and maintain VitePress/Docusaurus documentation that explains architecture, setup, contribution workflows, and user guidance for technical and research audiences.
- Build and support Electron-based desktop workflows for biomedical data curation, packaging web technologies into researcher-friendly local applications.

Developer Contributor | EyeACT | Remote

- Contribute to EyeACT tools for eye-imaging dataset discovery, metadata classification, external dataset registration, and publication workflows.
- Implemented Envision Portal features including dataset_description.json generation, publication metadata generation, review-process messaging, external dataset flows, and UI refinements.
- Work with Nuxt/Vue, TypeScript, Prisma/PostgreSQL, Azure storage integrations, metadata forms, and public-facing React/Next.js web properties.

Volunteer Developer | Fair Data Innovations Hub | San Diego, CA

- Maintained the FAIR Data Innovations Hub homepage with Vue.js, Tailwind CSS, and PostCSS; updated product pages and open-source project content for research audiences.

Project Manager | MAD App Development | San Bernardino, CA

- Led planning for an Android voting app focused on unbiased candidate information; created Figma flows, prototype documentation, maintenance notes, and team handoff materials.

PROJECTS

- **Posters.science:** Vue/Nuxt platform for sharing, discovering, and citing scientific posters with AI-ready structured metadata, repository-oriented workflows, and user/developer documentation.
- **Codefair:** TypeScript/GitHub-integrated app that helps research software projects improve FAIR alignment through guided checks, automation, documentation, and roadmap-oriented tooling.
- **Envision Portal:** Nuxt/Vue portal supporting dataset registration, metadata generation, external dataset submission, and publication workflows for eye-imaging data discovery.
- **Personal projects:** Framework LED matrix system-monitoring daemon concept; Python crypto metadata scraper; Solidity supply-chain contract with ERC-20 integration.

EDUCATION

B.S. Computer Science | California State University, San Bernardino

Coursework: Data Structures, Algorithm Analysis, Operating Systems, Databases, Compilers, Data Communications and Networks, Digital Logic, Machine Organization, FPGA Design