

Vera Gonzalez

Washington, D.C. | vera.lgbt | me@vera.lgbt | 301-503-5350

WORK EXPERIENCE

Banyan Storage

Software Engineer

Remote

February 2023 - June 2024

- Evaluated multiple software libraries to match appropriate technical solution for project goals, provided detailed technical reports and cost/benefit analysis to leadership, delivered final recommendations to meet accelerated goals for fast-paced startup environment.
- Retooled and simplified existing codebases, condensing a critical CLI application with over 20,000 lines of code to fewer than 4,000 while increasing functionality, improving end user experience, and implementing robust login and query paradigms to track database schema changes.
- Authored sophisticated SQLite tables, migrations, and queries within core backend services to deliver new features and improve the scalability of product infrastructure.
- Engineered browser-side WASM APIs for representing and interfacing with database models, collaborating with frontend engineers to ensure React and TypeScript code congruence.
- Designed and delivered comprehensive Rust library for reading and writing Content Addressable aRchives (CAR) in congruence with IPLD specifications, implementing granular test cases and code documentation while surpassing the functionality of existing technologies within the Rust ecosystem.

Terrapin Works

Software Developer

College Park, Maryland

September 2019 - December 2021

- Engineered software on a production scale for both internal and external applications, working closely with university professors and industry professionals, collaborating with peers to deliver high quality software and client support.
- Deployed public facing [website](#) still in use today comprised of hundreds of Drupal components, gaining and utilizing proficiency in Git, Jira, Drupal, JavaScript, TypeScript, and React in doing so.

PROJECTS

Polyblade

Creator; Programmer

Washington, D.C.

February 2024 - Present

- Synthesized research within the study of graph theory, mathematics, and geometry, developing a novel rendering tool for polyhedral graphs and transformations between them.
- Utilized the WGPU Rust crate in conjunction with WGSL shaders to create cross-platform graphics pipeline compatible with Vulkan, OpenGL, Metal, DX12, and WebGPU graphics APIs.
- Optimized frequent algorithms, including the All-Pairs Shortest Path problem, the exhaustive enumeration of Chordless Simple Cycles, heuristic vertex coloring, etc. for undirected unweighted polytopic graphs.

EDUCATION

University of Maryland

Bachelor of Computer Science | Concentration in Biology

College Park, Maryland

September 2018 - December 2022

- Bioinformatic Algorithms
- Cryptography
- Programming Language Paradigms
- Object Oriented Programming
- Organization of Programming Languages
- Algorithms
- Computer Systems Architecture
- Web Application Development
- Discrete Structures
- Programming Handheld Systems

SKILLS

Languages

Rust, SQLite, React, TypeScript, Lua, OCaml, Swift, SwiftUI, Java, Javascript, C, Python, Bash.

Softwares

Neovim, XCode, VSCode, Figma, Firebase Suite, Photoshop, Premiere, Davinci Resolve, Notion.

Paradigms

Agile Development, CI/CD, MVVM, Unit Testing, Integration Testing, UX Design & Optimization.