Nicolas Gonzalez

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Software Developer

Self-taught developer with 5 years of intensive, hands-on programming experience delivering backend systems, full-stack applications, and developer tools. Adept at quickly learning new technologies, building production-ready solutions, and working independently in remote environments. Skilled across multiple languages and frameworks, with a proven ability to automate workflows, optimize processes, and create robust tools for real-world use.

Professional Experience

Software Developer (Contract) - Bojano Homes LLC - *Remote*

March 2023 - May 2023, September 2024 - March 2025

- Automated client onboarding by creating a Python/Selenium/MongoDB tool to extract Airbnb listing data, reducing onboarding time from hours to minutes.
- Built and deployed a Discord bot (Python, PostgreSQL, Heroku) to send role-based reminders, improving task completion rates.
- Developed a full-stack property dashboard (Rust/Axum backend; TypeScript/Solid.js/TailwindCSS frontend) deployed on Shuttle.dev, enabling property owners to track real-time performance metrics.

Projects

Custom Programming Language   ⌨ nicdgonzalez/monkey

- Created an interpreter implementing lexical analysis, parsing, and evaluation, following Pratt parsing and recursive descent techniques.
- Leveraged Rust's language features to build a clean, safe, and maintainable API.
- Gained deep experience in language design principles and compiler/interpreter architecture.

Command-line Argument Parser   ⌨ nicdgonzalez/clap

- Developed a CLI argument parser that uses runtime introspection to automatically generate commands and options from function signatures.
- Reduced boilerplate for CLI applications, improving maintainability and developer experience.
- Designed with extensibility in mind, enabling developers to add custom argument types with minimal effort.

tmux Session Manager   ⌨ nicdgonzalez/orbit

- Built an interactive tmux session manager using fzf for fuzzy search and quick switching between environments.
- Implemented robust error handling, dependency checks, and exit code management for reliable automation.
- Designed to save developers time by streamlining the creation and navigation of multiple terminal sessions.

SQLAlchemy-like ORM   ⌨ nicdgonzalez/pysql

- Designed and implemented an ORM from scratch, modeling SQLAlchemy's declarative API style.
- Used Python metaclasses to map classes to database tables automatically.
- Improved understanding of the SQL standard, query building, and advanced Python concepts.

Technical Skills

Programming Languages: Python, Rust, JavaScript, TypeScript, Bash Script, Lua, Golang, C, C++
Web Frameworks: Axum, FastAPI, Solid.js, Next.js, TailwindCSS
Databases: SQLite, PostgreSQL, MongoDB
Cloud & Deployment: AWS Lambda, Shuttle, Vercel, Heroku
Tools: Git, Systemd, Crontab