

# Billy Leroy Williams

Software Developer

Mesa, Arizona

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[stackedalchemist.dev](https://stackedalchemist.dev) | [github.com/StackedAlchemist](https://github.com/StackedAlchemist)

## PROFESSIONAL SUMMARY

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Software developer focused on building structured web applications, dashboards, and interactive tools using modern JavaScript and native browser APIs. Experienced designing modular user interfaces, implementing algorithmic systems, and debugging complex workflows through browser developer tools, console tracing, and API inspection.

Founder of Stacked Alchemist, a freelance development practice building fully deployed browser applications including interactive games, financial dashboards, property management platforms, and algorithm-driven tools.

## TECHNICAL SKILLS

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**Languages:** HTML, CSS, JavaScript (ES6+)

**Tools & Platforms:** Git, GitHub, VS Code, Vercel, Cloudflare Workers

**Browser APIs:** Canvas API, localStorage, Fetch API, FileReader API

**Services & APIs:** Firebase (Firestore, Auth), Stripe, Anthropic Claude API, Open Library API, IGDB API

**Core Skills:** UI architecture, application debugging, algorithmic problem solving, frontend system design, API integration

## FEATURED PROJECTS

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### Arcane Circuit — AI Chess Engine

*Browser-based chess application built entirely with vanilla JavaScript*

- Minimax AI opponent with alpha-beta pruning across three difficulty levels
- Full legal chess implementation including castling, en passant, and pawn promotion
- Move history tracking and captured piece display
- Cyberpunk-themed UI design with modular three-file architecture

**Live Demo:** [stackedalchemist.github.io/arcane-circuit](https://stackedalchemist.github.io/arcane-circuit)

**Source:** [github.com/StackedAlchemist/arcane-circuit](https://github.com/StackedAlchemist/arcane-circuit)

### The Vault — Personal Finance Dashboard

*Structured financial command center for tracking accounts, budgets, and savings goals*

- Multi-account tracking across checking, savings, credit, and cash accounts
- CSV and PDF bank statement import with automatic transaction parsing
- Budget limits per category with visual progress tracking
- Savings goals with contribution history and analytics charts

**Live Demo:** [stackedalchemist.github.io/stacked-alchemist/the-vault](https://stackedalchemist.github.io/stacked-alchemist/the-vault)

**Source:** [github.com/StackedAlchemist/the-vault](https://github.com/StackedAlchemist/the-vault)

### Ironhold — Property Management Platform

*Full landlord-tenant property management system with AI-assisted communication*

- Multi-property portfolio dashboard with rent tracking, lease management, and maintenance workflows
- Tenant portal with payment status, lease viewing, and maintenance submission
- Lease creation with e-signature flow and document history
- AI-drafted maintenance responses powered by Claude API integration

**Live Demo:** [stackedalchemist.github.io/ironhold](https://stackedalchemist.github.io/ironhold)

**Source:** [github.com/StackedAlchemist/ironhold](https://github.com/StackedAlchemist/ironhold)

### The Codex — Book & Game Tracker

*Split-screen library tracker with live external API integration*

- Open Library API integration for real-time book search and metadata
- IGDB game database integration via Cloudflare Worker proxy
- Split-screen interface with custom status tracking, ratings, and notes
- Real-time search, filtering, and upcoming release tracking

**Live Demo:** [stackedalchemist.github.io/stacked-alchemist/the-codex](https://stackedalchemist.github.io/stacked-alchemist/the-codex)

**Source:** [github.com/StackedAlchemist/the-codex](https://github.com/StackedAlchemist/the-codex)

## ADDITIONAL PROJECTS

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- Cosmic Rift Defender — Space Invaders clone with enemy AI and particle explosion effects
- Arcane Tetris — Tetris implementation with ghost piece preview and hold mechanics
- Arithmetica Calculator — Scientific calculator with expression parsing and history log
- Spell Generator — Randomized fantasy spell engine with dynamic incantation generation
- Arcane Timepiece — Browser clock with world time zones, alarms, and countdown timer
- Arcane Ledger — Expense tracking application with categories, filters, and localStorage persistence

## PROFESSIONAL EXPERIENCE

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**Founder & Developer** | Stacked Alchemist LLC | Mesa, Arizona

- Design, build, and deploy structured web applications, developer tools, and interactive browser applications
- Manage full project lifecycle from system architecture through deployment and iteration
- Integrate third-party APIs and services including Firebase, Stripe, and AI completion endpoints

**Overnight Security Officer** | Mesa, Arizona

- Monitor facilities and maintain situational awareness across multiple concurrent systems
- Investigate incidents and maintain detailed documentation and structured reports
- Demonstrate reliability and independent decision-making in high-responsibility environments
- Apply analytical thinking to investigate and resolve operational issues under pressure

## DEVELOPMENT APPROACH

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Focused on building lightweight, maintainable browser applications without heavy frameworks, emphasizing deep understanding of underlying web technologies, browser APIs, and debugging workflows. All projects are intentionally built framework-free to demonstrate platform-level engineering competency.