

Matthew Paul Jose Macaspac

Tempe, AZ | (480) 840-5857 | mcspc96@hotmail.com

zyxwonderland.xyz | github.com/WhymzikalZyxyxZ | github.com/Code4Bananas

Professional Summary

Senior Software Engineer with 7+ years of experience building scalable backend systems, full-stack web applications, and distributed cloud services. Proven track record at American Express designing financial platforms processing real-time transaction data. Deep hands-on expertise across a wide language stack — Java, JavaScript/TypeScript, Go, Kotlin, Python — and modern cloud infrastructure including Cloudflare Workers, Durable Objects, and GitHub Actions CI/CD. Builder of production systems at personal scale: 490+ automated tests, 90%+ coverage, and 10+ language stacks integrated into a single pipeline.

Technical Skills

Languages:	Java, JavaScript, TypeScript, Go, Kotlin, Python, SQL, HTML, CSS, C#
Frameworks:	React, Node.js, Spring Boot, Jetpack Compose
Cloud & Infra:	Cloudflare Workers, Durable Objects, Cloudflare KV, Fly.io, GitHub Actions, PWA / Service Workers
Testing:	Jest, Vitest, JUnit, Kotlin Multiplatform Test; 490+ tests across 10+ language stacks
Databases:	PostgreSQL, Cloudflare KV, in-memory encrypted stores
Tools & Practices:	Git, REST APIs, WebSockets, MapLibre GL, CI/CD Pipelines, Agile / Scrum, System Design, OOP

Professional Experience

American Express — Phoenix, AZ

Software Engineer III

2023 – Present

- Architected and led development of core components in liquidity and global funding platforms supporting enterprise-scale financial operations across multiple business lines.
- Designed high-throughput backend services to ingest, process, and store real-time cash flow and transaction data with strict reliability and latency requirements.
- Owned PostgreSQL schema design and query optimization for financial analytics and regulatory reporting workflows.
- Drove technical direction for team, conducting architectural reviews, defining engineering standards, and mentoring junior engineers.
- Partnered with product owners and analysts to decompose complex business requirements into technical roadmaps, successfully delivering features across multiple release cycles.

Software Engineer II

2021 – 2023

- Developed enhancements and new features for financial funding systems relied upon by internal treasury and operations teams.
- Improved database performance through query tuning and indexing strategies, reducing report generation latency for financial analysis workflows.
- Led cross-team integration efforts to synchronize application services with enterprise platform dependencies.

Software Engineer I

May 2019 – 2021

- Contributed to backend development and database integration for enterprise financial platforms.
- Diagnosed and resolved production defects; participated in Agile sprints and peer code reviews.

Rentals in Rocky Point — Phoenix, AZ

Application Developer

May 2017 – October 2018

- Designed and built a full-stack booking and management platform for vacation condo rentals from the ground up using HTML, CSS, JavaScript, and React.
- Implemented responsive layouts for desktop and mobile and iterated on UX based on stakeholder and user feedback.

Projects

Personal platform live at zyxwonderland.xyz | Source: github.com/WhymzikalZyxyxZ

ZYXXYZ's Whymzykal Wunderland — Full-Stack Multi-Section Platform

JavaScript, HTML/CSS, GitHub Actions CI/CD, Jest, PWA / Service Workers

- Built and maintain a production website spanning games (13 titles with AI opponents and leaderboards), interactive tech apps (20+), art gallery, community forum, and blog.
- Designed a multi-language CI/CD pipeline covering JavaScript, TypeScript, Go, Kotlin, C#, Python, Swift, Dart, and C++ with 490+ automated tests and 90%+ coverage thresholds enforced on every push.
- Implemented PWA manifest, service worker caching, and open graph/SEO injection for all pages; deployed via GitHub Actions to Porkbun-hosted static hosting.
- Wrote a complete Kotlin Multiplatform chess engine (minimax with alpha-beta pruning, all legal-move generation, castling, en passant, promotion) with 30+ unit tests.

Anonymail — Disposable Encrypted Email Service ([mail.zyxwonderland.xyz](mailto:zyxwonderland.xyz))

Cloudflare Workers, Durable Objects, AES-256-GCM, Vitest (29 tests)

- Designed and deployed a serverless disposable inbox service: each session gets a unique address valid for up to one hour, with all messages encrypted in-memory via AES-256-GCM — nothing ever written to disk.
- Built a Cloudflare Worker gateway with per-session token auth, request routing, structured JSON logging, CORS/security header middleware, and a Durable Object managing mailbox state.
- Covered routing, auth, and edge-case flows with 29 Vitest integration tests; CI enforces they pass on every merge.

The Locator — Geospatial Mapping App (locator.zyxwonderland.xyz)

TypeScript, React, MapLibre GL, Cloudflare Workers, Cloudflare KV, Vitest (41 worker + 32 client tests)

- Built a real-time geospatial web app for dropping pins, adding notes, and sharing live map links; renders interactive vector tile maps via MapLibre GL.
- Architected a Cloudflare Workers API backed by Cloudflare KV for persistent pin storage with share-link generation; the TypeScript React client was fully type-checked with `tsc --noEmit` enforced in CI.
- 73 automated tests across worker and client layers (Vitest + React Testing Library) with geocoding debounce, layer visibility, and info-panel flows covered.

The Editor — Go-Backed PDF & File Processing Tool (zyxwonderland.xyz/technologist/editor)

Go, REST API, Fly.io, multipart file handling, gzip compression

- Developed a Go HTTP service deployed on Fly.io that handles PDF merge, split, rotate, page extraction, and gzip compression entirely in-memory — no files stored server-side.
- Designed a clean REST API with structured error responses, proper content-type negotiation, and a `.golangci.yml` lint config enforced in CI via `golangci-lint` (errcheck, govet, staticcheck).

Education

Arizona State University — Tempe, AZ

Bachelor of Science in Engineering, Computer Science | Barrett Honors College | 2015 – 2019