

WILLIAM BELLACH

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EDUCATION

University of Central Florida

Aug 2022 – May 2026

B.S. Information Technology, GPA 3.96

Orlando, FL

Certifications: PCAP Certified Associate in Python Programming, PCEP Certified Entry-Level Python Programmer (Python Institute, 2022)

EXPERIENCE

Retire With Time

2025 – Present

Founder

Wealth-management platform for financial advisors and their clients

- As sole engineer, built an enterprise wealth-management platform: 716 API endpoints on FastAPI, PostgreSQL, and Redis (~170K lines of Python), 176 pages across client, advisor, manager, and admin portals in Next.js 16, and a SwiftUI iOS app.
- Engineered a GPU-vectorized PyTorch Monte Carlo engine with Cholesky-correlated, Student-t fat-tailed returns that models federal and state tax, SECURE 2.0 RMDs, IRMAA, ACA subsidy cliffs, NIIT, and AMT across 15 withdrawal strategies.
- Made the engine run on Modal serverless GPUs, local GPU, or CPU behind a CI parity gate, with 3,000+ tests, tax checks against published IRS, SSA, and CMS values, and nightly mutation testing.
- Built Ricki, an AI planning assistant with 70+ tools served through a LiteLLM gateway to self-hosted models or OpenRouter; integrated Stripe per-seat billing, Plaid, WorkOS SAML SSO, and TOTP 2FA.
- Moved tax brackets and RMD tables into admin-editable database rows, so yearly tax-law changes ship as data, not code.

Billee Group Inc.

2025 – Present

Co-Founder

Custom software and self-hosted infrastructure studio

- Replaced a client's Wix store (SNG Soaps, four-figure monthly sales) with a custom Next.js 16, Stripe, and PostgreSQL platform with on-site subscription checkout, idempotency keys, and deduplicated webhooks.
- Built a transactional booking engine that prevents overselling; deployed client sites with Ansible to self-hosted servers.

StayStaked LLC

Aug 2024 – Jun 2026

Co-Founder

Skill-based esports competitions with real-money payouts, 200+ person waitlist

- Led engineering and wrote most of the code: FastAPI backend (~58K lines, 357 endpoints, 47-table PostgreSQL schema) on Fly.io, Next.js 16 web app (~90K lines), and Expo iOS and Android app.
- Built the money layer on Stripe Checkout and Connect payouts with automatic transfer reversal, idempotency keys, deduplicated webhooks, and atomic balance updates that close double-spend races.
- Designed a pool-based dynamic odds engine with bounded multipliers, pool-derived stake limits, and ELO matchmaking.
- Streamed live odds over one Server-Sent Events connection per client via Redis Pub/Sub; built 5 role-based portals, Twitch stream verification, and device-fingerprint fraud detection.

Lazard

Sep 2021 – Jun 2022

Software Engineering Intern

Global financial advisory and asset management firm

PROJECTS

Serla | Next.js, TypeScript, Drizzle, PostgreSQL, Redis, Go

serla.dev

- Built an open-source PostHog alternative: ingestion, funnels, session replay, feature flags, and SDKs in 5 languages (~33K lines).

Talon | Rust, Tokio, Solana, Yellowstone gRPC

- Built a low-latency Solana trading engine in Rust (~49K lines, 520+ tests); cut buy-path latency from ~50 μ s to ~20 μ s.

deskall | Rust, QUIC, Tauri, Direct3D 11, Media Foundation

- Built a P2P Rust system (~58K lines, ~670 tests) sharing keyboard, mouse, clipboard, and files across Windows and macOS.

geoai | PyTorch, SigLIP2, S2 geometry, FastAPI

github.com/b9llach/geoai

- Trained a Street View geolocation model on 3.8M panoramas; a ProtoNet selector cut median error from ~70 km to 24.9 km.

Georend (co-founded startup) | Nerfstudio, gsplat, PyTorch, three.js

Apr 2026 – Jun 2026

- Cut Gaussian Splat training time 55% for iPhone LiDAR property tours; landed 2 fixes in Pascal's three.js editor (24K+ stars).

TECHNICAL SKILLS

Languages: TypeScript, Python, Rust, SQL, Swift, Go, C++, C, Java, Bash

Frameworks: Next.js, React, React Native (Expo), FastAPI, SQLAlchemy, Drizzle, Node.js, Tauri, SwiftUI, PyTorch

Infrastructure: PostgreSQL, Redis, Docker, GitHub Actions, Fly.io, Vercel, Modal, Cloudflare R2, Nginx, Ansible, Linux

Integrations: Stripe (Connect, Billing), Plaid, WorkOS SSO, OAuth 2.0, WebSockets, Server-Sent Events, MCP