# ANGEL VALDEZ-MARTINEZ

Lawrence, MA · Martinezajr@outlook.com · 978-885-7834
linkedin.com/in/angel-valdez-martinez · github.com/Martinezajr · angelmart.dev

Senior Software Engineer with 5+ years building investment and risk systems at Liberty Mutual Investments, a $124B asset manager. Lead engineer on APEX, a quantitative fixed-income asset-allocation platform used by portfolio managers and traders, and a founding engineer on the firm's portfolio-risk platform used weekly by the Chief Risk Officer. Full-stack across Python, React, and Snowflake/Postgres data layers.

## EXPERIENCE

**Liberty Mutual Investments** — Boston, MA 2022 – Present
*Senior Software Engineer (Aug 2024–Present) · Software Engineer (2023–2024) · Associate Software Engineer (2022–2023)*

- Lead engineer on **APEX**, a quantitative fixed-income asset-allocation platform used by portfolio managers and traders in the Global Fixed Income group; promoted to project lead after rapid early delivery and designated sole owner of the quantitative engine following the founding quant's departure.
- Replaced a manual, Excel-based allocation process with a yield-curve-driven analytics engine that derives income, rolldown, and credit premium from Treasury and spread curves to evaluate asset classes for risk-adjusted return; integrates Bloomberg and BRS Aladdin data over a Snowflake/Postgres layer.
- Built APEX's contribution analytics, weighted-average risk metrics, cashflow modeling, and React saved-views interface; set roadmap and gather requirements directly with the product owner and a VP of investment innovation.
- One of two founding engineers on **LPS (LMI Portfolio Summary)**, a portfolio-risk platform delivering live NAV, risk-budget, and stress-scenario views to risk and investment teams; built to the **Chief Risk Officer's** requirements, it replaced a manual report-assembly process and is used weekly by the CRO, who has driven its expansion into the firm's broader risk reporting.
- Led migration of LPS's core components from Dash/Plotly to native **React** on the same Django backend, eliminating per-chart callback round-trips that made multi-level drilldowns slow — drilldowns went from multi-second to near-instant — and rebuilt the UI on Liberty's design system for a production-grade interface.
- Platform owner and SME for **Dash Enterprise** across LMI: sole admin of the Bamboo/GitHub → Dash Enterprise deployment pipeline and the shared server hosting apps for multiple business units; ran four quarterly security-redeploy cycles, authored the runbook, and served as the org's Plotly escalation contact.
- Reconciled **10 years of portfolio holdings data** during a SQL Server → Snowflake migration, correcting firm-wide classification errors (FIPOP hierarchy, sector-path mappings) that every downstream report depended on; rebuilt the GFI asset report from unusable prior work alongside the business stakeholder and data team.
- Authored core modules of LMI's **shared Django library** used across front-office applications, including reusable SSO authentication and S3 access patterns adopted company-wide.

**Liberty Mutual Insurance** — Boston, MA 2020 – 2022
*Software Engineer Intern → Technology Associate*

## PROJECTS

**munyun** — angelmart.dev Solo project

- Personal-finance and net-worth platform built and shipped solo, end-to-end: Go (net/http, no framework) over Postgres with a Next.js + TypeScript frontend, deployed on Railway and Vercel. Models net worth as an append-only time series with debt-payoff what-if modeling, CSV import with hash deduplication, and an AI insights panel; built to learn Go in production.

## SKILLS

**Languages:** Python, Go, JavaScript, TypeScript, SQL
**Frameworks & Frontend:** Django, React, Next.js, Dash/Plotly, Tailwind
**Data & Infrastructure:** Snowflake, PostgreSQL, Redis, AWS, Docker, REST APIs
**DevOps & Observability:** Bamboo, GitHub Actions, CI/CD pipelines, DataDog

## EDUCATION

**Saint Anselm College** — Manchester, NH 2021
*B.S., Computer Science · Minors: Web Design, Cyber Criminology*