

Robert (Bip) Sutton

Columbus, Indiana | bippal@gmail.com | (812) 927-0777
linkedin.com/in/robert-s-a0438613b | github.com/bippal | bipsbites.com
Live demo: <https://clotho-pi.vercel.app>

Available for: Fixed-fee AI feature sprints (1 to 3 weeks) and enterprise AI pilots (4 to 8 weeks). Remote or on-site. Supabase, Stripe, Anthropic Claude API, React, FastAPI.

PROFESSIONAL SUMMARY

Independent software developer who ships production AI features into software that already runs real workloads. Multiple live production applications, including an AI procurement intake tool, a full-stack analytics platform with real-time ML pipelines handling 332,000+ records, and multiple iOS apps with StoreKit 2 in-app purchases. Six years at Cummins Inc. leading engine testing and data systems with direct SAP Ariba experience for capital equipment procurement at Fortune 500 scale. Promoted from hourly to exempt on merit without a college degree. Fixed-fee engagements, written scope, working code.

CORE STACK

AI and ML integration: Anthropic Claude API (structured outputs, tool use, streaming), CatBoost, scikit-learn, isotonic calibration, node2vec graph embeddings, Dixon-Coles Poisson, ChromaDB vector search, Model Context Protocol (MCP).

Full-stack and backend: React 19, Vite, Tailwind CSS, FastAPI, Supabase (PostgreSQL with Row-Level Security, edge functions, real-time), Vercel (deployment, edge runtime, cron), Stripe, REST and WebSocket, CI/CD.

Data engineering: PostgreSQL, SQL Server, Oracle, SQLite. Schema design, query optimization, ETL, pipeline automation, external API ingestion with retry and rate-limit handling.

iOS: Swift, SwiftUI, SwiftData, Xcode 16, StoreKit 2, Supabase iOS SDK.

Procurement systems: SAP Ariba (6 years direct hands-on) for capital equipment, non-catalog purchasing, PO lifecycle, supplier coordination, procurement data extraction.

Test engineering and DAQ: AVL PUMA, LabVIEW (G), ETAS INCA, HORIBA, dSPACE HIL, CAN bus.

LIVE PRODUCTION WORK

Clotho. AI procurement intake. React + FastAPI + Supabase + Anthropic Claude API. Live at clotho-pi.vercel.app. Three working features: AI-assisted supplier name disambiguation, structured field extraction from unstructured RFA emails, and an in-flight request tracker that replaces manual SharePoint workflows. Built for Fortune 500 procurement use cases.

Full-stack analytics platform. React 19 + Vite + Tailwind + Supabase PostgreSQL (26 tables, RLS) + Vercel edge-function cron + Anthropic Claude API. Real-time data pipeline handling 332,000+ records. End-to-end ML prediction pipeline feeding the production web app.

Calibrated ML pipeline. CatBoost gradient-boosted trees with isotonic probability calibration, node2vec graph-embedding features, quantile dead-zone filter. Dixon-Coles bivariate Poisson with scipy optimization. Complete training, holdout validation, calibration, deployment.

Oscar Predictor. ML prediction model for film industry awards. Forecasted 7 of 7 categories correctly at the 98th Academy Awards (March 2026), with the full prediction posted publicly the night before the ceremony. Demonstrates calibrated modeling against a non-gaming, independently-verifiable real-world event.

Automated data pipelines. External API ingestion (ECMWF/GFS/HRRR weather ensemble, public statistics APIs, Anthropic Claude, Stripe), schema normalization, ETL, validation, archival, scheduled batch and real-time processing.

iOS apps. DisasterPrepApp, MeetingSync, Cauldron (StoreKit 2 in-app purchases, sandbox validated).

REPRESENTATIVE ENGAGEMENT TYPES

- **AI feature sprint** (1 to 2 weeks): add chat, doc parsing, or AI-powered search to an existing SaaS on Supabase or PostgreSQL. Claude API integration, UI component, tests, deploy.
- **Enterprise AI pilot** (4 to 8 weeks): supplier disambiguation, SAP Ariba workflow extensions, audit package assembly, variance commentary drafting, spec doc parsing, ticket classification and routing.
- **Data pipeline build** (2 to 4 weeks): external API ingestion, schema normalization, ETL, scheduled processing, Postgres storage with RLS.

PROFESSIONAL HISTORY

Team Lead, Engine Testing and Data Systems

Cummins Inc. Plant One and Cummins Tech Center, Columbus, IN. January 2010 to October 2016.

- Promoted from Direct Workforce Unit to Office/Clerical Unit on merit without a college degree. Rare internal path at a unionized Fortune 500.
- Led the weekend shift for engine testing at a Fortune 500 diesel engine research facility. Test execution, team coordination, schedule, data integrity, compliance across concurrent programs.
- Used SAP Ariba daily for capital equipment procurement: specialty CNC tooling, long-lead-time components, non-catalog industrial equipment. PO lifecycle, supplier coordination, procurement data reporting.

- Participated in and helped run ISO audits during Cummins' ISO certification adoption.
- Designed and maintained SQL schemas for test and measurement data. Wrote queries against enterprise test data warehouses.
- Ran quality data audits. Verified CMM data compliance against engineering specifications.
- Programmed DAQ and test automation: Python, LabVIEW (G), AVL PUMA scripting on a Cummins-internal Linux distribution.
- Weekend Safety Team Lead and trained first responder.
- Facilitated recurring cross-functional meetings with design engineers, test engineers, and engineering management.

Founder and Operator, Bips Bites (bipsbites.com)

2016 to Present (concurrent). Columbus, IN.

- Operate a catering and direct-to-consumer food business serving churches and community events across southern Indiana.
- Developed "Dust of Deliciousness" BBQ rub through a supplier partnership with Marion Kay Spices (Brownstown, Indiana, established 1889). Owned recipe specification, supplier negotiation, quality standards, and packaging.
- Launched and manage multi-channel DTC sales on bipsbites.com, Etsy, and eBay.

Store Manager, Rent-A-Center, Seymour, IN

2003 to 2009.

- Promoted to Store Manager at age 20. Youngest in Rent-A-Center company history.
- Full P&L: 5 employees, approximately \$2M in rental inventory.

HOW I WORK

Fixed fees. Written scope. 50 percent upfront, 50 percent on delivery. Client owns the code. I retain the right to reference the engagement as a case study unless opted out.

RECOGNITION AND EDUCATION

Winner, Indiana State Web Design Contest (2002). Youngest Store Manager in Rent-A-Center company history (age 20). Trusted with classified internal test programs at Cummins Tech Center. Seymour High School, 2002.