

Shouwang Huang

Software Engineer

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SUMMARY

Software engineer with 12+ years turning messy, revenue-critical workflows into reliable data pipelines and decision tools.

EXPERIENCE

Orbis / Software Engineer (*Remote*)

11/2025 - Present

- Implemented a Chrome Manifest V3 extension and Supabase Edge Functions that turn event pages into structured contacts and import them into the app, wiring up the full event to contact to import flow.
- Added rate limiting and instrumentation around scraping and imports to monitor extraction success, protect upstream sites, monitor costs and debug failures by batch.

Maximum New York / Software Engineer (*Remote*)

11/2025

- Built a budget and pension flow explorer by normalizing NYC OMB budget presentations, using AI-assisted mapping to align line items with NYC Open Data pension fund endpoints, and exposing the result as an interactive Sankey.
- Set up GitHub Actions pipelines to pull source datasets into Supabase and run repeatable cleaning and projection jobs so civic visualizations stayed up to date without manual refreshes.
- Developed deck.gl maps and a civic structure graph used in instructor materials to teach how NYC agencies, budget flows, and civic processes interact.

Fractal Tech / Software Engineering Fellowship (*New York, NY; full-time, ~700+ hours; six-day weeks*)

08/2025 – Present

- Built an AI-powered documentary creator that takes structured metadata, routes it through schema-driven OpenAI prompts, validates the JSON response, and assembles it into playable scenes behind an authenticated, rate-limited API.
- Implemented a Git-like version control tool with a React DAG viewer, SHA-256 content addressing, and SQLite persistence to explore different ways of representing and querying commit graphs.

Arroweye Solutions / Business Analyst (*Chicago, IL*)

11/2016 - 11/2024

- Walked into a manual shipping billing workflow where staff hand-sorted a large UPS billing file into client workbooks and relied on brittle Excel formulas to calculate charges for a ~\$10M/year profit center - designed and implemented an Excel/VBA billing pipeline that ingested SQL Server exports and UPS/USPS shipment files, applied our shipping rate logic, used improved formulas to flag lines needing manual review, and used macros to handle client-specific rates into billing workbooks.
- By enforcing the correct rate logic end-to-end, the pipeline corrected previously-documented underbilling across roughly \$10M in annual shipping revenue—eliminating about \$500K in leakage and roughly two FTEs worth of manual reconciliation—and later served as the reference implementation when engineering rebuilt the permanent ingestion system.

Robert Half / Consultant (*Chicago, IL*)

08/2015 - 11/2016

- Built Excel and VBA-based dashboards and automated reports for enterprise clients in healthcare and food production, reducing manual reporting work and supporting budget and operations reviews.

Klauff Realty / Analyst (*Chicago, IL*)

11/2011 - 08/2014

- Repurposed an existing, fragile VBA property management workbook into a batch-print workflow that generated legal-size investment property summaries, so investment staff could review hundreds of properties in meetings without editing the underlying spreadsheet.

SELECTED TECHNOLOGIES USED

TypeScript, JavaScript, SQL, React, Node.js, Chrome extensions (Manifest V3), Supabase Edge Functions, Vercel serverless functions, PostHog, GitHub Actions, deck.gl, Cytoscape.js, OpenAI API, Vercel AI SDK

EDUCATION

Northwestern University, B.A., Economics