

Subham Bhattacharya

West Bengal, India | +91 82509 10526 | hello@subhambhattacharya.com
subhambhattacharya.com | github.com/subham-hq | linkedin.com/in/subham-bh

SUMMARY

Backend developer building Flask systems with multi-tenant isolation, role-based access control, and strictly typed Python. Computer Science undergraduate at BITS Pilani, moving into engineering after four years running manufacturing operations.

TECHNICAL SKILLS

Languages: Python, TypeScript, SQL, C, HTML/CSS

Backend: Flask, Jinja2, REST APIs, SQLite, session authentication, RBAC, Werkzeug, Flask-WTF (CSRF)

Typing & Code Quality: mypy (strict), typing Protocols, generators, decorators, ruff, ESLint, pre-commit hooks

Frontend: Next.js, React, TypeScript, Tailwind CSS, Zod, Three.js

Infrastructure: Git, GitHub Actions (CI), Cloudflare Pages/Workers, GraphQL, Content-Security-Policy, Linux, Bash

In progress: asyncio, concurrency (threads, process pools), data structures & algorithms

PROJECTS

OrderFlow | *Python, Flask, SQLite, Jinja2, Flask-Session*

[Code](#) | [Demo](#)

- Built a multi-tenant B2B order management system, scoping every query by `company_id` to enforce strict tenant isolation on a shared schema.
- Modelled the order lifecycle as an explicit state machine (pending → approved → fulfilled / rejected), validating each transition server-side instead of trusting client-submitted state.
- Enforced role separation with custom `admin_required` / `client_required` decorators, server-side sessions, Werkzeug password hashing, and CSRF protection on mutating routes.
- Represented currency as integer paise rather than floats, eliminating rounding drift across order totals and invoices.

subhambhattacharya.com | *TypeScript, Next.js, Cloudflare Workers, GraphQL*

[Live](#) | [Code](#)

- Deployed a statically exported Next.js site on Cloudflare Pages, resolving all GitHub activity data at build time through the GraphQL API so no third-party service is called at runtime.
- Wrote a Cloudflare Worker to handle contact submissions with Zod-validated payloads, hardened the site behind a strict Content-Security-Policy, and gated every push on a GitHub Actions typecheck, lint, and build pipeline.

EXPERIENCE

Managing Director

May 2024 – Present

Agam Agrovet Private Limited

West Bengal, India

- Own end-to-end operations for an animal nutrition manufacturing business: production scheduling, quality control, procurement across 40+ suppliers, and distribution to 60+ business customers.
- Introduced digital purchase order tracking in place of a manual register process, cutting procurement turnaround time by 40%.
- Built a WhatsApp-based order confirmation workflow that put every order in writing before dispatch, reducing customer disputes by 50%.

Managing Director

Sep. 2022 – Present

Anandam Breeding Private Limited

West Bengal, India

- Managed order tracking and a floor team of 20, introducing camera-verified stock reconciliation to improve inventory accuracy and accountability.

EDUCATION

Birla Institute of Technology and Science, Pilani

Rajasthan, India

Bachelor of Science in Computer Science

Mar. 2026 – Mar. 2030

- Relevant Coursework:** Introduction to Computing Systems (C, pointers, memory layout), Discrete Mathematics (proofs, graph theory, combinatorics), Linear Algebra & Optimisation (matrix methods, gradient-based optimisation)

CERTIFICATIONS

CS50x: Introduction to Computer Science, Harvard (completed) · **Python for Everybody**, U. Michigan (4 of 5) · **CS50 AI with Python**, Harvard (in progress)