

SHOBHIT PANDEY

Senior Software Engineer

Singapore | +6580686125 | Shobhitpandey8@gmail.com

linkedin.com/in/shobhit-pandey | github.com/Shobhit-pandey | shobhit-pandey.github.io

PROFESSIONAL SUMMARY

Senior Software Engineer with 7+ years of experience building customer-facing B2B products, cloud platforms, and reliable data-processing systems across AWS, Azure, and GCP. Experienced in Python, Django, Java, and React, with production ownership spanning distributed systems, data pipelines, observability, security, and multi-cloud migration. Works directly with customers from requirements through rollout and manages engineers and interns. Uses structured AI-assisted workflows to speed up implementation and strengthen code review.

CORE SKILLS

Languages: Python, Java, JavaScript, TypeScript

Backend and Data: Django, Django REST Framework, Spring Boot, Maven, Celery, REST APIs, API design, PostgreSQL, Redis, database indexing, caching, performance tuning

Frontend: React, Angular, Ant Design, responsive interfaces, data visualization, user experience, pagination, asynchronous loading, browser performance

Cloud and Platform: AWS (S3, Lambda, ECS, ECR, RDS, ALB, CloudFront, Route 53, EC2), Azure (Service Bus, Functions, Blob Storage, Storage Tables, Virtual Machines, Virtual Machine Scale Sets), GCP (Pub/Sub, Cloud Storage, Compute Engine, Google Kubernetes Engine), Docker, Kubernetes, Nginx, Unicorn, GitHub Actions, CI/CD

Data Pipelines and MLOps Infrastructure: Prefect, event-driven architecture, idempotency, distributed locks, retries and backoff, recovery checkpoints, scheduling, operational SLAs

Observability and Operations: Logging, metrics, tracing, Elastic, Sentry, Supabase, Metabase, n8n, Microsoft Teams alerting, incident response

Security and Documentation: Role-based access control (RBAC), least privilege, secrets management, Passbolt, Tailscale, Postman, technical documentation

Agentic and AI-Assisted Engineering: Claude Code, Codex, multi-agent code review, persistent task context, external standards research, validation checks, human approval

PROFESSIONAL EXPERIENCE

POLYBEE | Senior Software Engineer

Singapore | Feb 2023 - Present

- Delivered dashboard visualizations, phenotyping, forecasting, and a linear-programming optimizer by turning customer feedback and real-world field constraints into practical harvesting schedules.
- Cut dashboard page loads from 15-20 seconds to under 3 seconds and API p95 latency from over 60 seconds to 150-200 milliseconds through PostgreSQL indexing and Nginx caching. Delivered 3 to 5 GB heatmap layers through CDN distribution, pagination, and asynchronous loading.
- Designed and deployed containerized Django and React services on AWS using ECS, ECR, ALB, and Route 53. Built GitHub Actions CI/CD pipelines and Redis-backed Celery workflows for reliable releases and long-running background tasks.
- Orchestrated Prefect workflows processing about 2 TB per week across about 45 daily runs, with an average runtime of about 90 minutes and a 12-hour delivery target. Reduced failures from about 40% to under 5% through replay-safe stages keyed by capture, client, and site identifiers, distributed locks, retries, and recovery checkpoints.
- Raised on-time data delivery from about 60% to 98% for 3 to 4 enterprise customers by adding recovery checkpoints and operational alerts. Sustained 99.9% uptime across Australia and the US.
- Created exactly one processing run per agricultural row by building event-driven AWS ingestion for drone data, with missed-event recovery, duplicate protection, and safeguards for incomplete uploads.
- Architected Azure processing with Service Bus, Functions, Blob Storage, Storage Tables, Virtual Machines, and Virtual Machine Scale Sets. Protected in-flight GPU work while scaling a worker fleet from two instances to zero and cut idle virtual-machine time by about 20% through fail-safe cleanup and forced shutdown.
- Kept production pipelines running through cross-cloud migrations of data and processing workloads across Azure and GCP. Completed a major migration in about one month using canary runs, client-by-client cutovers, Pub/Sub, Cloud Storage, Compute Engine, and Google Kubernetes Engine.
- Cut issue-identification time to under 2 minutes and scaled operational reporting to tens of thousands of lots. Removed a 1,000-row API ceiling and added pipeline status, failure attribution, watchdog reconciliation, dashboards, and alerts across Prefect, Supabase, Metabase, Elastic, Sentry, and n8n.
- Delivered browser-based agricultural-row detection that matched 118 human-marked rows within seconds. Preserved edit, undo, and human-review controls.
- Owned RBAC and least-privilege permissions across AWS, Azure, and GCP. Deployed and maintained a self-hosted Passbolt secrets-management service behind Tailscale.

Leadership and Customer Delivery

- Managed interns and mentored 5 to 10 engineers and interns over time. Assigned work, answered implementation questions, unblocked delivery, and led code reviews, design reviews, and planning across product, pipeline, automation, and observability workstreams.
- Partnered with customers, R&D, operations, and company leadership to translate requirements and field incidents into production changes and customer-specific rollouts.
- Authored technical documentation and maintained Postman API collections to support onboarding, implementation handoffs, and production troubleshooting.

OYO ROOMS | Software Development Engineer 2

Gurugram, India | Jul 2022 - Jan 2023

- Improved the availability and scalability of high-traffic, customer-facing hotel-booking services by building Java and Spring Boot microservices with Maven and supporting Kubernetes deployments on Azure.
- Raised automated unit-test coverage by about 30% for Java services, reducing regression risk and improving release confidence.
- Guided SDE 1 engineers through implementation questions and delivery work alongside individual-contributor responsibilities.

MAXIML LABS | Senior Software Engineer

Chennai, India | Apr 2021 - Jul 2022

- Delivered end-to-end modules for an industrial analytics platform by translating stakeholder and operational requirements into production features.
- Enabled independent deployments by helping split a monolithic application into microservices and introducing continuous integration across multiple services.
- Enabled secure uploads and downloads across multiple storage providers by building a serverless media-storage service with pre-signed URLs.
- Expanded analytics APIs and added page injection for richer product instrumentation.
- Improved mobile reliability in low-connectivity environments through offline usage patterns.

MAXIML LABS | Software Engineer

Chennai, India | May 2019 - Apr 2021

- Built backend services for an analytics platform using Django, Django REST Framework, Celery, and PostgreSQL, including multilingual support and asynchronous workloads.
- Enhanced Angular applications with route guards, reusable npm libraries, HTTP interceptors, and IndexedDB-based storage.
- Designed data-extraction, analysis, and indexing solutions, documented technical specifications, and resolved implementation conflicts across product modules.

EDUCATION

Indian Institute of Information Technology, Vadodara, India

B.Tech, Computer Science and Engineering | CGPA: 8.06 | 2015 - 2019

LANGUAGES

Languages: English, Hindi