

Aryan Srivastava

📞 6374572596 — ✉ Aryan Srivastava — 🔗 [linkedin.com/in/aryan-srivastava](https://www.linkedin.com/in/aryan-srivastava) — 📄 github.com/AryanSrivastava — 🌐 Aryan Srivastava Portfolio

Summary — Python Backend Developer experienced in designing and deploying scalable **web applications using Django, REST APIs, and FastAPI**. Improved system performance by **optimizing Django ORM queries** and implementing efficient database architectures, **resulting in a 35% reduction in query time and 25% faster API responses**. Collaborated across QA and frontend teams to deliver production-ready features with enhanced reliability. Authored reusable backend utilities and documentation that **improved team onboarding efficiency by 30%** and streamlined development workflows.

Skills

Programming	Python, SQL, Java, C++, Bash.	Cloud & DevOps	AWS (EC2, S3 basics), Docker, Git/GitHub, Deployment Pipelines
Backend Develop	Django, Django REST Framework (DRF), FastAPI, Flask, RESTful API Design.	AI/ML & Data Science	Scikit-learn, Pandas, NumPy, Matplotlib, LangChain, OpenAI API, Twilio API.
Frontend	HTML5, CSS3, JavaScript (Basics)	Methodologies	Agile/Scrum, Test-Driven Development (TDD), Clean Code Practices, Version Control.
Test Automation	Selenium WebDriver, PyTest, API Testing, CI/CD Integration.		

Experience

K12 Techno Services Pvt Ltd

Jun 2025 – Present

IT Software Department

Software Engineering Intern - Backend and Automation Engineer

Client: Notable Placement

- Optimized PostgreSQL ORM queries using select.related and indexing, achieving 40% improvement in API response efficiency.
- Implemented role-based access control (RBAC) and modular serializer logic to enhance data security and code reusability.
- Collaborated with product and QA teams to deliver backend solutions for DG Runtime, Admissions, and User Management systems.

Client: Challenges Unlimited

- Automated end-to-end regression and UI testing workflows using Selenium and PyTest, improving QA coverage by 70%.
- Integrated custom logger utilities, dynamic locators, and screenshot capture to streamline debugging and reporting.
- Designed data-driven testing frameworks to validate multi-role functionality across core Eduvate features.

Projects

DG Generator Runtime & Fuel Efficiency Tracker

Jun 2025 – Aug 2025

- Built a Django-based backend system to log, track, and report DG runtime, diesel usage, and branch-level efficiency.
- Improved data retrieval speed by 40% through ORM optimizations and indexed queries.
- Delivered role-based access control and reporting dashboards, enhancing transparency for 50+ school branches.

AI-Driven Seismic Detection & Safety Automation System

📄 [github.com/AI Driven Seismic Activity](https://github.com/AryanSrivastava/AI-Driven-Seismic-Activity)

- Architected an end-to-end AI-driven seismic monitoring platform integrating Machine Learning, OpenAI, and Twilio APIs, enabling real-time detection and automated SMS alerting for emergency response.
- Reduced manual monitoring workload by 80% and achieved a 200+ hour monthly time saving for field teams through automated safety alerts and predictive event recognition.
- Created an interactive Streamlit interface for live monitoring, analytics, and alert visualization across 15+ test zones.

MiniCloud – Dockerized Cloud Management Platform

📄 [github.com/MiniCloud](https://github.com/AryanSrivastava/MiniCloud)

- Engineered a FastAPI-powered control plane and agent network to simulate AWS-like EC2 orchestration — enabling dynamic container deployment, health monitoring, and lifecycle management of Dockerized instances.
- Integrated MinIO (S3-compatible storage) using Boto3 for secure file upload, listing, and presigned URL downloads, achieving 100% local cloud simulation of compute and storage services.
- Containerized and automated deployment using Docker Compose with isolated networks, persistent volumes, and RESTful APIs — demonstrating end-to-end backend orchestration and DevOps pipeline design.

Education

SRM Institute of Science & Technology, Kattankulathur

Sept 2021 – May 2025

Bachelor of Technology in Computer Science

Majors: Computer Science