Prakarsh Srivastava

+36 70 678 8671 | prakarshsrivastava2004@gmail.com | Portfolio | LinkedIn | GitHub
Debrecen, Hungary - Available to work in Budapest

Technical Skills

Languages: Python, Java, SQL

Toolwork: Azure Data Factory, Azure Data Lake, Databricks, ETL/ELT Pipelines, PostgreSQL, MySQL, Redis, Pandas, NumPy, PySpark, Spring Boot, Hibernate/JPA, REST APIs, Git, Docker, Kubernetes, Linux, CI/CD, Azure DevOps, Postman

Experience

Hungarian Startup University Program – University of Debrecen Debrecen, Hungary
Software Developer *Mar 2025 – Sep 2025*

- Developed a real-time chat application with a secure backend, implementing **JWT-based authentication** and **OAuth** for session management, while designing a scalable **publish–subscribe architecture** using **WebSockets** to enable low-latency, real-time communication.
- Improved system performance and reliability by integrating **Redis caching**, significantly reducing message delivery latency under concurrent usage and supporting smoother real-time interactions.
- Worked within an **Agile/Scrum** environment, contributing to sprint planning, code reviews, and iterative feature delivery in collaboration with a multidisciplinary team; source code available on GitHub.

Aid Global Foundation (NGO) Remote
Backend Developer (Volunteer) *Jul 2025 – Present*

- Refactored a **TypeScript-based backend** to improve scalability and maintainability by introducing modular architecture and server-side validation.
- Built and optimized **Supabase APIs** for campaign publishing, media storage synchronization, and product–tag data relationships.
- Implemented backend support for rich-text editor workflows, including file uploads, autosave functionality, and image compression pipelines.
- Collaborated closely with frontend developers to ensure data integrity, SEO compliance, and consistent lifecycle management across campaign entities.

Projects

AutoInsight: Automotive KPI Analytics and Anomaly Detection Jan 2025 – Mar 2025

- Built an interactive analytics dashboard using **React** and **D3.js** to visualize **10+ automotive KPIs** with drill-down and cross-filtering support.
- Implemented configurable **anomaly detection** using rolling z-score and IQR methods to flag outliers in time-series data.
- Designed batch data pipelines that reduced manual exploratory analysis time by approximately **25–30%**.

AI-Powered Textual Knowledge Chatbot Jul 2025 – Sep 2025

- Developed an AI chatbot using a **Retrieval-Augmented Generation (RAG)** pipeline with **FastAPI** and **FAISS** to support semantic search over indexed textual content.
- Indexed and queried **700+ verses** to deliver context-aware responses with persistent user session memory.
- Optimized inference and deployment workflows to reduce average response latency by approximately **20%** during local testing.

Personal Expense Tracker Application Mar 2025

- Developed a secure full-stack expense tracking application using **Java** and **Spring Boot** with **JWT/OAuth**-based authentication and role-based access control.
- Designed ETL-style pipelines for transaction ingestion, data cleaning, aggregation, and automated reporting.
- Integrated **PostgreSQL** with **JPA/Hibernate** to generate weekly financial summaries and email notifications.
- Improved personal financial tracking efficiency by approximately **30–35%**.

Education

University of Debrecen Debrecen, Hungary
B.S. in Computer Science — GPA: 4.67/5.0 *Sept 2022 – Jan 2026*

- Concentration Software / Backend Engineering, Big Data
- Key Coursework Data Structures and Algorithms, Object-Oriented Programming, Software Design, Database Systems, Computer Networks, Statistics