
Parsa Salehipour

Saskatoon, SK • p.salehipour@outlook.com • +13062413315 • github: <https://github.com/uttaparsa>

Education

University of Saskatchewan

Computer Science, MSc. GPA 90.5/100

Saskatoon, SK
Graduating Aug 2025

Ferdowsi University of Mashhad

Computer Engineering, BSc. GPA 3.42/4

Mashhad, Iran
Graduated July 2022

Experience

University of Saskatchewan

Saskatoon, SK

Research Assistant

September 2023 – Present

- Utilized MLOps tools (clearml for hyperparameter optimization) to scale and control the experiments.
- Ran experiments on multiple machines, while tracking their state and metrics.

NeshanMaps

Mashhad, Iran

Backend Developer

July 2022 – July 2023

- Contributed to a team of 5 on a data processing pipeline consisted of 20+ services for mapping applications with over 2M daily users and 2B+ daily DB records managed on a k8s cluster with more than 4TB of RAM.
- Collaborated with multiple teams on various tasks, ensuring seamless integration through Scrum methodologies.
- Crafted large-scale SQL queries as a daily task to handle millions of records of data
- Designed and implemented RESTful and gRPC APIs using Java Spring Boot, ensuring robust data transfer and internal service integration.
- Worked extensively with spatial data in PostGIS, utilizing EPSG standards and executing complex spatial queries to support geospatial functionalities.
- Enhanced service communication efficiency through message-passing-based systems with RabbitMQ.
- Gained experience with monitoring tools like Kubernetes, Grafana, and Prometheus for system performance tracking.
- Refactored a codebase of 20+ microservices to improve maintainability and performance.

Projects

Implementation and Deployment of a Web Application to Evaluate and Track Road Trips

2021

- Remote Freelance with an Irish Company
- Implemented the Backend using Django and PostgreSQL and deployed with Docker
- Implemented Speed and Acceleration tracking and storage algorithms.

AI-enhanced Thought Management App

2022 – Present

- Ongoing personal project
- A React-based Single Page Application (SPA) for personal thought recording and management.
- Similar thoughts semantic search and semantic navigation of thoughts using vector databases and the "nomic-embed-text" embedding model.

- Backend implemented in Django, deployed with Docker and Nginx.
- Using minio as object storage.
- Features included (backend):
 - Session-based authentication with session access control
 - Relational database with self-referential SQL relationships to support features like thought link and backlinking
 - Note diff history tracker
 - Multiple database using Django Routing
- <https://github.com/uttaparsa/notes-api>

Awards and Experiences

- Digikala (Iranian Online Marketplace) DevOps Bootcamp Quera Contest
 - Ranked 17th out of 3000+ participants (July 2022)
 - Awarded internship offer for being among the top 20.
- AI Challenge, Sharif University Participant, Worked in a Reinforcement Learning System Ranked among top 8 teams out of 50 participating teams (Winter 2020)
- International Conference on Computer and Knowledge Engineering (ICCKE)** – Executive Committee Member (2020)

Skills & Interests

Technical: Linux, git, Kubernetes, Docker, Spring Boot

Language: Python, Java

Cloud Platforms and Services: Google Cloud Platform (GCP), Claude build (API), Google's aistudio, Terraform

Interests: Swimming and cycling