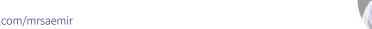
Amirhossein **Saemi** Software Engineer

@ saemiamirhossein@gmail.com





Experienced backend developer with a strong academic background in distributed systems, operating systems, and computer networks. Demonstrated capabilities in developing applications in various fields such as Mobility, Networking, and Energy with a focus on performance and reliability. Proficient in leveraging domain-specific concepts to deliver robust and efficient backend solutions, showcasing adaptability and transferable knowledge across industries. Committed to writing testable, standard code to ensure maintainability in all projects.

SKILLS

Programming Languages Python, Rust, C

> Web Frameworks Django, Flask, FastAPI, Django REST Framework

Big Data Apache Spark, Hadoop Databases PostgreSQL, Redis, InfluxDB

Git, Docker, CI/CD, Test Driven Development Tools & Methods

Distributed Systems & Architectures

> P2P, Event-Driven, Microservices

➤ Replication, Sharding, Fault Tolerancy, Consistency

> RPC, gRPC, Message Passing, PubSub, HTTP/HTTPS

Libraries Asyncio, SQLAlchemy, Pandas, Numpy, Tensorflow, Keras



EXPERIENCES

Oct 2024 Internet Researcher, Max-Planck-Institut, Germany

Apr 2024

Analyze a dataset of 3.5 billion DNS TXT records to identify insecure or malicious use cases.

Replicate the findings of the paper "TXTing 101: Finding Security Issues in the Long Tail of DNS TXT Records" by Van Der Toorn et al.

Python | Apache Spark | Apache Hadoop

Now

July 2023

Software Engineer, GEOPS, Germany

- > Contributed to the development and enhancement of multiple Python repositories.
- Upgraded existing repositories to use SQLAlchemy2 and integrated its asynchronous drivers.
- Contributed to the integration of APIs from Deutsche Bahn, Swiss Railways, and S-Bahn Munich.

Python Asyncio Django Flask SQLAlchemy GraphQL PostgreSQL Redis GTFS/GTFS-RT

Mar 2023

Software Engineer, GRIDSINGULARITY, Germany

- Apr 2022 Further developed the energy exchange for different energy markets.
 - Enhanced matching strategies for better bid/offer matching.
 - Refactored legacy code and improved performance.

Python Django GraphQL PostgreSQL DRF

Mar 2022 Jan 2020

Software Engineer, TUEMA, Italy

- > Designed an integrated accounting system.
- > Migrated existing Django templates to REST APIs.
- Developed and maintained CI/CD pipelines.

Python Django PostgreSQL DRF Docker

Jan 2020

Apr 2019

Software Engineer Intern, Mahsan, Iran

> Developed web APIs for interacting with a DataDiode device.

Created APIs to modify settings across various system components such as the operating system, DD engine, OpenLDAP, network, NTP, and Active Directory.

Python Django Linux

A LANGUAGES

Persian English







2023-2025 M.Sc. Computer Science - Universität des Saarlandes - Germany 2017-2021 B.Sc. Computer Engineering - Qom University of Technology - Iran