

Amirhossein SAEMI

Software Engineer

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Saarbrücken, Germany



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, Energy, and Tourism with a focus on performance and reliability. Proficient in leveraging domain-specific concepts to deliver robust and efficient back-end 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

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

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 Apr 2024	Internet Researcher, MAX-PLANCK-INSTITUT, Germany <ul style="list-style-type: none">➤ 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. <div>Python Apache Spark Apache Hadoop</div>
Now July 2023	Software Engineer, GEOPS, Germany <ul style="list-style-type: none">➤ 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. <div>Python Asyncio Django Flask SQLAlchemy GraphQL PostgreSQL Redis GTFS/GTFS-RT</div>
Mar 2023 Apr 2022	Software Engineer, GRIDSINGULARITY, Germany <ul style="list-style-type: none">➤ Further developed the energy exchange for different energy markets.➤ Enhanced matching strategies for better bid/offer matching.➤ Refactored legacy code and improved performance. <div>Python Django GraphQL PostgreSQL DRF</div>
Mar 2022 Jan 2020	Software Engineer, TUEMA, Italy <ul style="list-style-type: none">➤ Designed an integrated accounting system.➤ Migrated existing Django templates to REST APIs.➤ Developed and maintained CI/CD pipelines. <div>Python Django PostgreSQL DRF Docker</div>
Jan 2020 Apr 2019	Software Engineer Intern, MAHSAN, Iran <ul style="list-style-type: none">➤ 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. <div>Python Django Linux</div>

LANGUAGES

Persian	●	●	●	●	●
English	●	●	●	●	○
German	●	●	○	○	○

EDUCATIONS

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