Emanuele Viglianisi
Software Engineer (Data)
emavgl@gmail.com
https://emavgl.github.io

I am a Software Engineer with experience in designing and implementing big data platforms. I have a strong background in data engineering, cloud computing, distributed systems and security. I am originally from Sicily, Italy, but currently living in Linz, Austria. In my free time, I enjoy running, cooking (and eating), reading, and exploring new places. I am looking for a new challenge as a Software Engineer in a dynamic and innovative company.

Experiences

- **[2020-2023] Software Engineer (Data) at Runtastic**

  At Runtastic, I worked as Software Engineer in the Data Team. My main focus was designing and implementing the data platform and the associated CI/CD.

  - I contributed to the migration of data and data platform to a cloud-based solution, based on Databricks and Microsoft Azure.

  - I took part in designing and implementing the architecture of our data platform, including the ETL pipelines, systems to ensure GDPR compliance and data quality, CI/CD tooling, orchestration, and alerting.

  - I worked with the data science team, implementing data products used by backend services such as:

    * *Follower Recommendation*: A graph-based recommendation system to find and suggest users who share common interests and connections. The solution is based on Pyspark and Graphframes. The system increased the average number of followers per user by 60%.
    * *Zero2Hero*: A model identifying user behaviours and app features that drive the engagment of new users over time.

  - In Q1 2022, I interned in the Android Team, developing new features related to Activity Sharing for the adidas Running and adidas Training android apps.

  - In Q3 2022, I worked with the adidas sales Data & Analytics team, advising on best practices and collaborating with the team to implement a new ETL streaming pipeline. The pipeline powered an almost real-time dashboard used for making quick decisions during key selling moments (e.g., Black Friday).

  - In 2023, I was also helping with managing the project to design and implement a system to exchange data with adidas.

  - **Technologies**: Python, PySpark, Databricks, Azure Data Factory, Azure EventHub, Azure Web App, Azure Functions, Kafka, Kotlin

- **[2018-2019] Software Engineer and Researcher at Fondazione Bruno Kessler (FBK)**

  - I worked on a European funded project (EIT Digital) in the fintech domain. I developed a new state-of-the-art blackbox testing tool to run functional and security tests on RESTful APIs. The associated research paper won the Distinguished Paper Award at the ICST 2020 conference.

  - I worked on a block-box security testing tool for Ethereum Smart Contracts.

  - In Q4 2019, I was a teaching assistant for the master's course "Security Testing" at the University of Trento. The course covered OWASP top 10 vulnerabilities and how to write automated test cases using Selenium to attack and verify the fix of the vulnerable applications.

- **Technologies**: Python, Z3, Blockchain (Ethereum), Solidity, Web3JS, Truffle Framework, Node.JS, Java, Gradle.

Educations

- **[2016 − 2018] Master of Science - Computer Science**, University of Trento, full marks with honors
- **[2013 − 2016] Bachelor's degree - Computer Science**, University of Catania, full marks with honors

Certifications

- Microsoft Certified: Azure Fundamentals
- Microsoft Certified: Azure Data Engineer Associate

Webinar and Conferences

I presented at the following conferences:

- Big Data Week 2022 Bucharest and Big Data Conference Europe 2022
  ZERO2HERO: An Advanced Data Platform To Drive User Engagement - **Emanuele Viglianisi**, Daniele Montesi

- Data+AI Summit Europe, 2020-11-18 and CI/CD Template Webinar, 2020-10-20
  Developing ML-enabled Data Pipelines on Databricks using IDE & CI/CD at Runtastic - **Emanuele Viglianisi**, Michael Shtelma

Publications

I am the main author of the following research publications:

- RESTTESTGEN: Automated Black-Box Testing of RESTful APIs **(Distinguished Paper Award)**
  E Viglianisi, M Dallago, M Ceccato 2020 IEEE 13th International Conference on Software Testing, Validation and Verification (ICST)

- A federated society of bots for smart contract testing
  E Viglianisi, M Ceccato, P Tonella
  Journal of Systems and Software, 110647

Check my profile on Google Scholar for more.