Emanuele Viglianisi

Software Engineer (Data)
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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 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.

Work experience

Software Engineer (Data) at Runtastic

2020-2023 - Worked on designing and implementing Runtastic's new data platform, based on Databricks and Microsoft Azure, including ETL pipelines, systems to ensure GDPR compliance and data quality, CI/CD tooling, orchestration, and alerting. - Worked with the data science team, implementing data products 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 and increased the average number of followers per user by 60%. - Zero2Hero: A model identifying user behaviors and app features that drive the engagement of new users over time - Helped with project management and design of a multi-cloud system to exchange data with adidas. - Q3 2022: Worked with the sales Data & Analytics team of adidas. Advised on best practices for implementing data pipelines and KPI. Designed and helped with the implementation of a new ETL streaming pipeline for adidas' sellout data, which powers an almost real-time dashboard used for making quick decisions during key selling moments (e.g., Black Friday). - Q1 2022: Temporarily worked in the Android Team, developing new Activity Sharing features. - **Technologies**: Python, PySpark, Databricks, Azure Data Factory, Azure EventHub, Azure Web App, Azure Functions, Kafka, Kotlin

Software Engineer and Researcher at Fondazione Bruno Kessler (FBK)

- Worked on a EU-funded project (EIT Digital) in the fintech domain. 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.
- Q4 2019: Worked as teaching assistant for the master's course "Security Testing" at the University of Trento. The course covered OWASP top 10 and how to write automated security tests using Selenium.
- **Technologies** Java, Gradle, OpenAPI, Spring Boot, Maven, RESTful API

Educations

- **Master of Science - Computer Science**, University of Trento, full marks with honors
  2016-2018

- Specializing in Software Engineering, Security Testing, Machine Learning, Big Data Analysis and Data mining. Thesis in collaboration with FBK, consisting in a novel tool for black-box security testing of Ethereum Smart Contracts. Technologies: Python, Z3, Blockchain (Ethereum), Solidity, Web3JS, Truffle Framework, Node.JS.
- **Bachelor's degree - Computer Science**, University of Catania, full marks with honors **2013-2016**

Certifications

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

Presentations at 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

More on the Google Scholar.

Language skills

- Italian: Native speaker
- English: Professionally Proficient
- German: B1