



Shahriar Yazdipour

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EDUCATION

- **Masters in Research in Computer & Systems Engineering** Technische Universitat Ilmenau
2019 - 2022 Thuringia, Germany
 - Software & System Engineering
 - Software Architecture
 - Complex Embedded System
 - Information Systems
 - Algorithms
 - Research Project (Text-to-SparQL)
 - Research Seminar (COVID19 Tweets Data Graph Analysis)
 - Research Skills (Github GraphQL Security Flaw)
 - Image Processing and Robot vision Lab
- **Bachelor of Computer Science** Kharazmi University
2013 - 2018 Tehran, Iran
 - **GPA:** 17/20 Iranian Scale
 - **Thesis 20.0/20.0** : A Recommendation System for Undergraduate/Graduate Applicants Seeking Financial Scholarship for Studying Abroad (Advisor: Dr. Nahid Taherian)
 - Data Mining
 - Compiler
 - Probability and Statistics
 - Data Structure and Algorithms
 - Fundamentals of Theory of Computations
 - Software Design Basics
 - Databases
 - Entrepreneurship

PUBLICATIONS

- **Github Data Exposure using GraphQL Security Design Flaw (1k\$ Bug Bounty)** 2019
S.Yazdipour, CCSE2020 - The 10th International Conference on Computer Engineering, Ilmenau Germany [Published]*
- **Decision Support for International Students Who Want to Fund Their Graduate Studies** 2017
S.Yazdipour, N.Taherian "(IEEE) International Conference on Machine Learning and Data Science, India" [Published]*

SKILLS & EXPERIENCES

- **Programming Languages:**
 - **Python** (PyTorch, Huggingface, Keras, Flask, Web3, PyAutoGui, ...)
 - **Java** (Quarkus, Spring, Android, Swing,...)
 - **C#** (Xamarin, UWP, WPF, .NET,...)
 - C++/Arduino and Some Front-End Experience.
- **Tools:** Git, Microsoft Azure, Docker, Kubernetes
- **Databases/QLs:** MySQL, SQLite, Neo4j, SparQL

PROFESSIONAL EXPERIENCE

- **BackEnd Software Engineer Intern at 'TomTom' - Berlin, Germany:** Aug 2020 - Now
 - Main Task: Delivering services in the field of traffic and travel information, tested and applied in the real-production system.
 - Working in **Agile** environment with daily standups and **Jira Kanban** discussions.
 - Developing **JAVA Spring** Web Service for TPEG2-EAW and TPEG2-EVA Services.
 - Developing **JAVA Quarkus** Web Service with MQTT Pub/Sub Service.
 - Customizing and deploying **VernemQ MQTT Broker**.
 - Deployment on **Microsoft Azure and AKS Kubernetes Cluster**.
- **Android Software Engineer at 'GFPishro Co' - Tehran, Iran:** Oct 2017-Jan 2019
 - Main Task: Creating a Geo Information Service/Software-Package, including Web, Desktop and Mobile applications for our Customers.
 - Developing **Java / Android** Mapping system based on MapsForge renderer system, graphhopper offline navigation for our customers using Intranet.
 - Developing Simple Reporting Application for Client in **iOS Xamarin Forms with C#**.

PROJECTS

- **Text-to-SPARQL Question Answering Transformer (NL2Script):** Aug 2021
 - Main Task: Implementation of sentence embedding for learning the transformation of questions to SPARQL queries with DBpedia - WikiData data integration in **Google T5 and BERT Transformer**.
 - Research on finding related works in Transformers and Language Models.
 - Pre-processing and collecting a data-set with specific features needed.
 - Implement Fine Tuning steps for Google T5 model using **Pytorch**.
 - Developing pipeline from dataset to deploying the model to Huggingface repositories.
- **Covid-19 Opinion Leaders on Twitter - Data Mining and Graph Analysis:** Sep 2020
 - Main Task: Identifying opinion leaders in Twitter using social network **Graph Analysis** methods.
 - Pre-processing and gathering 300GB twitter data-set with specific features needed for the project.
 - Using Social network analysis methods such as Centrality Measures to find opinion leaders.
 - Using **NetworkX** Python library for network analysis and **Dask.py for parallel computing**.
- **Developed MIRA Robot navigation system:** Dec 2019
 - **OpticalFlow and Color Segmentation** Navigation using its camera system with C++
 - Object Detection using ResNet, ImageNet architecture with **Pytorch**
- **Recommendation System for Undergraduate/Graduate Applicants Seeking Financial Scholarship for Studying Abroad:** 2017
 - We have implemented a technique to bypass vBulletin CMS authentication system to crawl unstructured raw data from it and provide a dataset
 - Using **data analysis methods such as Decision tree, K-Nearest Neighbor and K-Means** to determine chance of getting fund for graduate students.
- **Wireless Garage Door Cracker**
- *Capturing sub-1 GHz signals with RTL-SDR and Analyzing with GQRX and sending signals with YardStick1.* Jul 2017
- **UWP Applications (First Persian UWP Developer):** 2015 - 2016
 - Developed iTehran which is the First Persian UWP application.
 - Developed multiple UWP and WPF application with more than 30,000 users download overall.
 - Used MVVM, Xaml and C# and multiple Database systems.
 - Designed UI and Logo of each application using Adobe XD and Photoshop.