

Vahab Jabrayilov

vjabrayilov.github.io

Email : jабrayilov.vahab@gmail.com
vahab.jabrayilov@metu.edu.tr
Mobile : +994 77 35588 11
Github : github.com/vjabrayilov
LinkedIn : www.linkedin.com/in/vjabrayilov/

EDUCATION

- **Middle East Technical University** Ankara, Turkey
Bachelor of Science - Computer Engineering; GPA: 3.87/4.00 Aug 2019 - June 2023
Courses: Data Structures, Formal languages and Automata Theory, Programming Languages, C Programming, Logic Design, Statistics, Cyber Systems and Information Security, Operating Systems, Computer Architecture, Cloud Computing
Activities: METU Managment and Consulting Club, METU Computer Club, METU ACM Student Chapter
- **Middle East Technical University** Ankara, Turkey
Minor of Electrical Electronics Engineering Aug 2020 - June 2023

EXPERIENCE

- **Google Summer of Code** Remote
Software Development Engineer May 2022 - Sept 2022
 - **Thanos/Prometheus:** Optimized compaction/downsampling algorithm of the existing system, wrote unit and integration tests, devised a new block reader/writer interface and documented the process.
- **Penn State University, Computer Systems Lab** Remote
Undergraduate Research Assistant October 2021 - May 2022
 - **Classical consensus algorithms:** Implemented versions of Paxos (Multi Paxos, EPaxos, WPaxos) consensus algorithm in **Go, Java, C++ and Rust** languages, measured and optimized the system performance.
- **Kibrit Tech** Baku, Azerbaijan
Junior Software Development Engineer Feb 2021 - Oct 2021
 - **Real time monitoring service:** Reduced response time of real time monitoring service for call center management solution by 10 times through integrating Redis cache service.
 - **Web-chat integration service:** Designed and developed a microservice to integrate existing 3rd party chat application to user interface of the call center management solution.
 - **Customer support:** Had regular one-on-one meetings with clients, solved many production related problems ranging from configuring caller queues, analyzing log files for security purposes and maintaining the availability of the entire system.
- **Middle East Technical University** Ankara, Turkey
Student Teaching Assistant March 2021 - Present
 - **CENG 240 - Python Programming for Engineers:** Conducted lab sessions, solved practical and algorithms related problems and helped 100+ students to grasp fundamentals of computer programming with Python language.
- **eiLink** Baku, Azerbaijan
Research Assistant Feb 2019 - Aug 2019
 - **Predicting Distributed Acoustic Sensing result using existing data :** Preprocessed the petroleum data from British Petroleum(BP), conducted statistical analysis on it and visualized it through **matplotlib** of **Python**. Designed and developed machine learning models to predict DAS result in **Python**

PUBLICATIONS

- *An Empirical Analysis of IDS Approaches in Container Security*
Yigit Sever, Goktug Ekinici, Adnan Harun Dogan, Bugra Alparslan, Abdurrahman Said Gurbuz, **Vahab Jabrayilov** and Pelin Angin in SRMC workshop (September'22)

HONORS AND AWARDS

- Earned foreign student scholarship of Middle East Technical University, only awarded to about 10% of foreign students - August 2019
- Ranked in top 5%textbf(800/800) at SAT subject tests in Math II, Physics and Chemistry globally - May 2019
- Represented Azerbaijan and earned honorable mention of ACM ICPC in NEERC region - December 2018
- Ranked 1st(**700/700**) nationally at Azerbaijan university entrance exam among 100.000 test takers - July 2017
- Earned "Golden medal for Excellence" in education by the Ministry of Education of Azerbaijan - June 2017

PROJECTS

- **Interactive NFA-DFA Playground:** A project for helping struggling students to test themselves and learn rough topics of Finite Automata through experimenting with playground. Been developing the back-end through Spring Boot framework and Java language.(August '21)
- **Processing and Clustering Satellite Data:** Processed raster and vector files, and applied clustering algorithm to get regions of interest. Used Rasterio, Shapely and Geopandas. *Link*. (June '21)
- **Numerical computation library for Matrix Operations:** A project to calculate fast matrix operations effectively. Been developed using C library and dynamic memory allocation.(May '20)

VOLUNTEER EXPERIENCE

- **Translation Work:** Helped to translate parts of "Algorithms Unlocked" by Thomas H. Cormen from English to my mother tongue Azerbaijani, for Azerbaijani students to enjoy the book as much as I had.
- **Student volunteer at PLDI'22:** Helped in organization of premier programming languages conference, assisted attendees and presenters.

SKILLS SUMMARY

- **Programming Languages:** Python, C/C++, Java, Go, Rust, SQL, Bash
- **Frameworks:** Spring, Netty, Tokio, Actix, Flask
- **Tools:** Docker, Kubernetes, Git, Zipkin, Graphana, Prometheus, Thanos, TLA+
- **Languages:** English, Russian, Turkish, Azerbaijani