

Riad Mukhtarov

+994(50)-899-8676 | riadmukh@gmail.com | [LinkedIn](#) | [Portfolio](#)

EDUCATION

University at Buffalo, New York - BS in Computer Science Awards: Undergraduate Teaching Assistant Award, Multiple Dean's List Honors	Aug 2020 – May 2024 Buffalo, New York
--	--

EXPERIENCE

Information and Communication Technology (ICT) Assistant <i>COP29 United Nations Climate Change Conference</i>	Oct 2024 – Nov 2024 Baku, Azerbaijan
Head Teaching Assistant - Data Structures <i>State University of New York at Buffalo</i>	Aug 2022 – May 2024 Buffalo, New York
<ul style="list-style-type: none">Led data structures instruction (asymptotics, graphs, trees, hashing) in Scala/Java for 1,000 studentsManaged 20 TAs, coordinated labs/exams, and served as the primary liaison between students and facultyBuilt and graded assignments, quizzes, and exams while enforcing academic integrity standardsRan weekly reviews and debugging sessions, supporting 200+ students with hands-on helpStreamlined course logistics and student support workflows to improve consistency and outcomes	

Software Engineer <i>EZ Pro Billing and Collection Inc.</i>	Sep 2021 – May 2023 New York, New York
<ul style="list-style-type: none">Engineered Python/MongoDB TCP handler and ADA-compliant HTML/CSS/JavaScript, using Agile practicesAutomated team point allocation through dynamic login and registration system, upon successful task completionLeveraged WebSockets for real-time chat, reducing workload by 90%, earning promotion	

PROJECTS

MatchSentinel <i>GitHub</i> Java, Spring Boot, RabbitMQ, PostgreSQL, Liquibase, React, TypeScript, Docker	Jan 2026
<ul style="list-style-type: none">Built a fraud pipeline with REST APIs and RabbitMQ across AI, rules, cases, notifications, and reportingImplemented per-service persistence with Liquibase and idempotent reporting updates for reliable event handlingDelivered a live analyst dashboard with filters, drill-downs, and a pipeline simulator for end-to-end flow	
FinFlow Wallet API <i>GitHub</i> Java, Spring Boot, Spring Security, JWT, MySQL, JPA, JUnit	Jan 2026
<ul style="list-style-type: none">Implemented secure RESTful authentication and authorization using JWT-based stateless sessionsDesigned and optimized relational data models with JPA/Hibernate and authored SQL-backed repository queriesApplied security practices including password hashing, token expiration, and request-level authentication filteringDeveloped integration tests to validate login, token issuance, and protected endpoint access	
Raft-based Consensus Algorithm Go, UDP, Protobuf	May 2024
<ul style="list-style-type: none">Implemented a Raft-based algorithm, managing leader election, log replication, and state machine transitionsEngineered fault-tolerant consensus protocol for enhanced system fault tolerance and consistency across the clusterDeveloped and tested the Raft server to handle concurrent operations and client interactions efficiently	
Distributed Hash Table Go, TCP, Protobuf	Feb 2024
<ul style="list-style-type: none">Built a peer-to-peer storage system using Kademlia routing for $O(\log n)$ node lookupsOptimized data reliability with a recursive search algorithm to maintain dynamic network connectivityDesigned a Protobuf-based message protocol for high-performance data retrieval across multiple platformsIntegrated and tested nodes to ensure scalability and consistency in simulated distributed environments	

TECHNICAL SKILLS

Programming Languages: Java, Python, Go (*familiar:* Rust, JavaScript, Scala, C, PHP)

Backend Development: Spring Boot, FastAPI, RESTful APIs, JWT Authentication, RabbitMQ

Databases & SQL: MySQL, PostgreSQL, MongoDB, JPA/Hibernate, Liquibase, SQL Query Design

Systems & Infrastructure: Linux, Git/GitHub, Docker, Testcontainers, CI/CD basics, SSH