

SHAKIR ABDULLAYEV

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Education

University of Toronto

Honors Bachelor of Science - Computer Science Specialist and Business Minor

Awards

UTM Entrance Scholarship - Merit based award for students with a distinguished academic record

Experience

Veeva Systems | *Software Engineer*

May 2023 - May 2024

- Optimized high-demand infrastructure handling **20 million+** monthly requests with **AWS, Kubernetes, and Prometheus** to improve efficiency.
- Enhanced system reliability by resolving critical **multi threaded** code which affected cluster node availability for our customers.
- Proactively** led a comprehensive **cybersecurity audit** to analyze dependencies and address potential vulnerabilities.
- Upgraded **AWS instances** across regional clusters, maintaining compatibility and continuous service availability.
- Utilized **SOLID design principles** to code applications on **Java Spring Boot** while creating comprehensive testing using **Mockito and Junit** as testing frameworks, while maintaining 99% code coverage

TD Bank Canada | *DevOps Software Engineer*

May 2022 - September 2022

- Enhanced the **KPI project** used by the C-suit and executives of the Platforms and Technology Division, contributing to improved performance metrics and operational insights.
- Streamlined project pipelines using **DevOps tools** such as Bitbucket, Jenkins, GitHub Actions
- Engineered a **webhook** integration between the scraper module and database, enabling real-time data flow **decreasing latency over 10 times**.
- Built a robust **REST API** to facilitate efficient data transfer, increasing system responsiveness and data accuracy.

Projects

URL Shortener Service | *Java, Docker, Redis, Cassandra, Nginx*

- Developed a scalable URL Shortener similar to bit.ly, storing user-submitted key-value pairs.
- Collaborated on a multi-host system setup, integrating **proxy and database servers** with monitoring.
- Optimized performance using **parallelization** and **caching**.
- Applied **CAP theorem** to balance consistency, availability, and fault tolerance.
- Implemented **consistent hashing** for disaster-resilient data replication.
- Re-engineered the system with **Docker, Redis, Cassandra, Nginx** using **Docker Swarm** orchestration.

Personal Website | *React, Next.js*

- Built a personal website with **React and Next.js**, leveraging server-side rendering to reduce load times and increase **employer engagement**.
- Designed smooth transitions and animations with **JS and CSS libraries** like React Smooth-Scroll for an interactive user experience.
- Implemented a **gallery page** showcasing my film photography, using techniques like progressive image loading, lazy loading on scroll, and pop-up views for individual photos to optimize performance and visual appeal.

Exchange Guardian (PyJaC 2022 Winner) | *UiPath Studio, Forms*

- Developed a **webscraping tool** utilizing **UiPath**.
- Created a dashboard to fetch data from **major Canadian bank APIs** to get live currency exchange data
- Integrated UiPath **Forms** to display best USD-CAD exchange rates among major Canadian banks in an intuitive manner to **allow the users to sell/buy their currencies with the best price**.

Relevant Coursework

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|-----------------------|--------------------------|-------------------|------------------------|
| • Distributed Systems | • Data Struct & Analysis | • Database Design | • Embedded Programming |
| • Scalable Computing | • OOP | • Cybersecurity | • Parallel Programming |
| • Algorithm Design | • Operating Systems | | |

Technical Skills

Languages: Python, Java, JavaScript, React, Kotlin, C/C++, Mars Assembly, Bash Shell

Developer Tools: Android Studio, Linux, Bash, UiPath, JetBrains, Postman, Microsoft Docs and Excel

Technologies/Frameworks: Cassandra, Redis, Nginx, Next.js, Neo4J, Docker, Jenkins, Github Actions, Prometheus, Log4j, Apache Spark, Agile, Jira, Git, Github, Gitlab, Mockito, Spring Boot, Spring, Tailwind