Abdulbosit Anvarov

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Education

University of Washington — Greater Seattle Area, WA

Bachelor of Science in Computer Science — *August 2023*

Master of Science in Computer Science — *March 2027*

- **Relevant Coursework:** Parallel Programming, Distributed Systems, Machine Learning, Software Research, Data Structures, Algorithms, Computer Architecture, Operating Systems, Database Systems, Computer Vision

Experience

Software Engineer 1 — May 2025 – Present

Berkshire Hathaway - BNSF Railway — *Remote - Fort Worth, TX*

- Integrated Spring Boot features with Kafka messaging to reliably process 35M+ daily rail sensor readings at scale
- Created a backend microservice leveraging REST APIs to query 1M+ records from AWS S3 via Athena Engine
- Built Python-based Observability-as-Code to provision JSON-defined alerts into Grafana and vmalert at scale
- Designed scalable alert architecture for 1000+ services, improving monitoring coverage across BNSF platforms
- Reduced repeat on-call pages by 40% by using agentic AI to build Java guardrails for actionable alerts
- Supported migration of 100+ applications from Dynatrace to an open-source observability platform stack

Software Developer Co-Op — June 2024 – March 2025

Cencora — *Conshohocken, PA*

- Automated data transfer between databases, converting a manual process and boosting productivity by 30%
- Drove end-to-end delivery of 4 full-stack applications built on Maven, Spring Boot, Angular, and Oracle DB
- Documented all deliverables, creating high- and low-level design guides to support internal engineers

Software Engineer Intern — January 2024 – June 2024

Sensoria Health Inc. — *Redmond, WA*

- Collaborated in 50+ meetings to clarify requirements and communicate design decisions for .NET microservices
- Proactively identified and resolved 15+ metric inaccuracies in patient dashboards, improving system accuracy
- Built a JavaScript language-switching feature supporting 3 languages for multilingual patient progress tracking

Projects

FIFA Player Rating Prediction | *Python, Pandas, NumPy, Machine Learning*

- Conducted exploratory data analysis on 144K+ FIFA player records after extensive data preprocessing and feature engineering
- Reduced dimensionality by 18 components using Principal Component Analysis while preserving 95% of variance
- Improved prediction accuracy by 12% using XGBoost Regressor, outperforming alternative regression models

Parallel Wave 2D Diffusion | *C++, MPI, OpenMP, Git*

- Developed a 2D wave-propagation simulation based on the Schrödinger wave equation
- Parallelized computation using OpenMP static scheduling, achieving a 1.2× speedup over the sequential implementation
- Distributed workloads across six remote machines using MPI collective communication over TCP, achieving a 2.0× processing

Distributed Weather Forecast | *Java RMI, gRPC, Maven, Concurrency*

- Retrieved real-time weather data from Seattle's public API and deserialized JSON responses using the Jackson library
- Implemented multithreading for concurrent client requests and callbacks, ensuring reliable message delivery
- Benchmarked Java RMI against gRPC and measured 3× faster response times with Java RMI

Technical Skills

Languages: Java, Python, C/C++, C#, SQL, JavaScript, HTML/CSS, TypeScript
Frameworks & Technologies: Spring Boot, .NET, React, Node.js, Apache Kafka, ActiveMQ, IBM MQ, JUnit, Gradle
Cloud & Infrastructure: AWS, OpenShift, Kubernetes, Docker, Linux, Grafana, VictoriaMetrics, Prometheus, CI/CD (Jenkins)
Developer Tools: Git, Claude Code, Copilot, Google Colab, Jupyter Notebook