Abror Asralov

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EDUCATION

University of Arizona

Tucson, AZ

Bachelor of Science in Computer Science, Minor in Artificial Intelligence GPA: 3.69

Aug. 2022 - May 2026

TECHNICAL SKILLS

Languages: (Proficient) Java, Python, C, JavaScript, (Familiar) C#, Assembly

Frameworks: (Proficient) React, React Native, Node.js, Express, JUnit, (Familiar) Next.js, Swing, JavaFX Developer Tools: (Proficient) Git, Docker, MongoDB, (Familiar) Unity, Digital Ocean, Blender, AWS

Libraries: (Familiar) pandas, NumPy, Matplotlib

Spoken Languages: Uzbek (Native), Russian (Native), English (Professional)

Other: Strong problem solving & excellent communication skills, adaptability, and quick learning

EXPERIENCE

Student Software Developer

Sep. 2023 – Sep. 2024

Center for Digitar Humanities - University of Arizona

Tucson, AZ

- * Contributed to the development and enhancement of the *Discovering Community in the Borderlands* website, a platform supporting interdisciplinary research and collaboration in the digital humanities.
- * Designed and implemented interactive forms and dashboards, improving data submission and visualization efficiency by 30%.
- Collaborated with stakeholders to meet accessibility and usability standards, supporting over 100 active users across academic departments.

Student Production Crew Member

Jan. 2023 - Sep. 2023

Tucson, AZ

Arizona Public Media

- * Contributed to the filming and production of over 20 episodes of *Hollywood at Home*, a broadcast showcasing insights into classic films and interviews with industry professionals.
- * Assisted in on-location shoots, traveling to conduct interviews with filmmakers, historians, and cultural commentators, ensuring high-quality footage for the broadcast.
- * Coordinated with the production team to set up lighting, sound, and camera angles, optimizing efficiency and reducing setup times by 15%.
- * Worked closely with producers and editors to review and select final footage for airing, contributing to the seamless delivery of engaging content to an audience of thousands.

PROJECTS

$\underline{\text{The Checkers Game}} \mid \textit{Java, JUnit5, Swing, Git}$

Nov. 2024 - Dec. 2024

- * Built a fully functional Checkers game using Java Swing for the graphical user interface (GUI) and implemented the Model-View-Controller (MVC) design pattern to ensure clean separation of concerns and maintainable code architecture.
- * Created an intermediate-level AI opponent capable of analyzing multiple move paths and selecting the optimal strategy to maximize the chances of winning, significantly enhancing gameplay for the single-player mode.
- * Achieved 90%+ unit test coverage using JUnit to thoroughly test all game mechanics, including move validation, capturing mechanics, win conditions, and AI decision-making, ensuring robustness and accuracy in all gameplay scenarios.
- * Acted as the Scrum Master for a team of four, overseeing the project's progress by managing 200+ commits, coordinating branching and branch merging, and ensuring smooth collaboration and timely delivery through effective use of version control with Git.

Trie Data Structure Simulator | Java, JUnit5, Gradle, Git

Apr. 2024 - May 2024

- * Designed and built an efficient implementation of the Trie data structure capable of handling up to 10,000 strings for operations like search, insertion, and deletion with an average time complexity of O(n) per operation.
- * Created and executed over 30 unit tests using JUnit5 to validate core functionalities, ensuring a 95%+ code coverage for accuracy, reliability, and robustness
- * Demonstrated practical applications of the Trie through simulations of prefix matching, auto-complete for up to 5,000 queries, and dictionary storage in under 100ms per query
- * Collaborated in a team of four, managing 80+ commits with Git for version control and utilizing Gradle for streamlined build automation and dependency management.