Iskander Sermanizov

Computer Scientist

Date of Birth: December 10, 2001 Citizen: Republic of Kazakhstan

Contact

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LinkedIn

Education

Bachelor of Computing Science Thompson Rivers University Kamloops, BC September 2019 – April 2024 GPA: 3.4

Key Skills

Java C++ C# Python SQL HTML/CSS JavaScript PHP Android Studio

Objective

Aspiring Computing Science professional graduating from Thompson Rivers University with a strong foundation in software development. Eager to apply my academic knowledge in a dynamic tech environment.

Technical Skills

Programming: Proficient in Java, C++, Python, and SQL.

Web Development: Skilled in HTML, CSS, JavaScript, PHP, and modern web frameworks.

Mobile Development: Experience in developing applications for Android platform.

Software Design & Engineering: Strong grasp of software architecture, design patterns, and engineering principles.

Database Management: Competent in database design, development, and management using SQL.

Data Structures & Algorithms: Solid understanding of algorithmic techniques and data organization for optimal performance.

Networking & Security: Knowledgeable in network configuration, protocols, and security measures.

Artificial Intelligence: Familiarity with AI concepts and machine learning algorithms.

3D Animation: Introductory skills in 3D modeling and animation.

User Experience Design: Principles of human-computer interaction and user-centered design.

Business Skills

Accounting & Financial Analysis: Basic proficiency in financial accounting principles and economic analysis.

Marketing & Market Analysis: Understanding of marketing strategies and market research techniques.

Management Information Systems: Insight into the strategic role of information systems in business operations.

Statistical Analysis: Ability to apply statistical methods to data analysis and problem-solving.

Language Skills

Fluent in English, Kazakh and Russian.

Basic proficiency in French.

Soft Skills

Teamwork and collaboration.

Analytical and problem-solving abilities.

Communication and interpersonal skills.

Academic Achievements

Dean's List for 2 semesters.

Projects

SuperFly SwearJar

As part of my university capstone project, I worked on a team to develop an integrated application for SuperFly Aerial, a drone service company. The application, designed as a Chrome extension, aimed to track, and manage common office fouls such as profanity, late arrivals, and forgetting to unmute during meetings. We utilized modern web technologies including React.js, Next.js, and Firebase for development, and implemented a CI/CD pipeline using GitHub Actions for seamless deployment of new features.

Procedural Dungeon Generator

As part of my university coursework for a Procedural Content Generation (PCG) course, I developed a game demo in Unity that showcased the application of PCG. I implemented two algorithms for dungeon generation, Random Walk and Binary Space Partitioning (BSP). I also developed a system for procedural prefab placement, which involved data collection and analysis to decide on the dungeon's contents. A significant part of the project was extending the system to place agents, such as player characters and enemies, within the dungeon. I addressed the challenge of occupied or blocked tiles using a Breadth-First Search (BFS) algorithm to identify accessible tiles.