Tulsa, US, 74104 samuel.alberts@atlasschool.com 405.747.4396

SAMUEL ALBERTS

SOFTWARE ENGINEER | XR DEVELOPER | UNITY DEVELOPER | PYTHON DEVELOPER

PROFESSIONAL SUMMARY

Passionate software developer and technology innovator with over 4 years of hands-on experience, specializing in building cutting-edge applications across diverse domains, including machine learning, game development, web development, AR/VR experiences, and system programming. Dedicated to continuous learning and adapting to emerging technologies, with a focus on pushing the boundaries of software and hardware integration to drive innovation.

EDUCATION

2027

Artificial Intelligence and Network Engineering, University of Advancing Technology, Tempe, AZ

JAN 2022 - AUG 2023

Computer Science and Engineering, Holberton School, Tulsa, OK

Graduated having a specialization in Augmented Reality and Virtual Reality

JAN 2006 - JAN 2008

Associates in Music, Oklahoma State University-Main Campus, Stillwater, OK

Studied Music Theory and Composition with focus on Piano and Music Technology

CERTIFICATIONS

ΔLIG 2023

C# Programming at Unity

AUG 2023

VR Specialist at Unity

AUG 2023

Artist Certification at Unity

FEB 2025

Al Collaboration Tools for Project Management at ALX Africa

SKILLS

Unity, Unreal Engine, ARCore, Vuforia Engine, Winforms Applications, Python, C#, C, JavaScript, React, HTML, CSS, SQL, Git, GitHub, Linux, Gentoo, Docker, Command Prompt, Vim, Emacs, VS-Code, Multipass, NodeJS, SSH, OpenSSL, ThreeJS, BabylonJS, WebGL.

EMPLOYMENT HISTORY

JUN 2023 - PRESENT

Unity Instructor, Urban Coders Guild, Tulsa, OK

- Developing one 2D and 3D platformer to learn the basics of the Unity Engine for a class of ~20 kids to successfully be certified as Unity Artists
- Design interactive game development modules that bridge theoretical concepts with practical Unity applications, fostering student engagement in platformer creation while incorporating real-time feedback to optimize student understanding of game mechanics
- · Mentor aspiring developers through complex Unity concepts, providing individualized guidance for successful certification completion

JAN 2025

Software Developer, Al Collective, Tulsa, OK

As a student of Artificial Intelligence and Entrepreneurship, I bridge the gap between cutting-edge technology and business development. This unique intersection of technology, business, and innovation enables me to not only build solutions but also contribute to the strategic growth of startups, fostering a thriving tech ecosystem in Tulsa.

JAN 2025 - FEB 2025

Software Developer, ySpace, Nigeria

Through **collaborative problem-solving**, our volunteer team ensures robust testing, validation, and planning with a team of engineers in drone design. The companies goal is to contribute to cutting-edge drone technology designing simulations using MATLAB and Simulink to develop and optimize control algorithms to enhance UAV performance and anatomy for drones.

PROJECTS

Forgotten Heros

HTTPS://YOUTU.BE/DAZQNU02SOW

Unreal Engine, C++, VR Development, Oculus Developer Hub, Android Studio

Developed Forgotten Heroes, an immersive VR experience that honors the overlooked heroes of WWI. The project, built in Unreal Engine, featured a fully interactive prototype and presentation, allowing users to engage with historical narratives in a virtual environment. Optimized rendering for cost-efficient performance, ensuring smooth visuals and gameplay on VR hardware. Integrated Oculus Developer Hub and Android Studio to enhance development and deployment for standalone VR devices.

Movie Planet

HTTPS://GITHUB.COM/HASHTHAT/MOVIEPLANET

Python, Pandas, Kaggle API, Tkinter

Movie Planet is a data-driven movie discovery application that allows users to explore IMDB-rated films from a dataset of over 1 million movies. Built using Python with **Pandas** for data processing and the **Kaggle API** for sourcing movie data, the application provides a **random pick of the day** feature, helping users discover new films effortlessly. Check the video link out here: https://youtu.be/sB3mRxMdVlo

VR-Zombie_Shooter

HTTPS://YOUTU.BE/UDHHC47UGVU

Unity, C#, VR Development, Game Al, Physics Simulation

Developed a VR Zombie Shooter using the Unity Engine, integrating physics-based mechanics and Al-driven zombie behaviors to create an immersive gameplay experience. The game features dynamic zombie respawn points, realistic Al animations, and a responsive player death system.

Pyshell

HTTPS://GITHUB.COM/HASHTHAT/PYSHELL

Python, Linux, Git, Shell Scripting, Automation

Developed PyShell, a custom Python-based shell environment designed to streamline Linux development setup, Git management, and command-line learning. The shell provides an interactive experience with built-in wizards for GitHub integration, SSH key setup, and automated Git version control.

Cube

AR GEOLOCATION EXPERIMENT FOR ANDROID

Unity, C#, Vuforia Engine, Android SDK, Geolocation API

Developed an AR-powered geolocation measurement device using Unity and Vuforia Engine, enabling users to place virtual objects in an augmented environment and measure real-world distances in terms of longitude and latitude. Designed for Android devices, this system leverages GPS and AR tracking to provide accurate spatial measurements, making it particularly useful in robotics applications where precise location mapping is essential. Video Link Here: https://youtu.be/pc1HlizkiVk

Desktop VPN Map

HTTPS://GITHUB.COM/HASHTHAT/VPN_WINFORMS-MAP

C#, WinForms, Leaflet.is, VPN, Geolocation

Developed VPN Map, a desktop VPN application using WinForms and C#, allowing users to log into a VPN, change their location, and visualize the updated geolocation on an interactive Leaflet.js map. The application provides real-time mapping of IP-based locations, enhancing transparency and usability for VPN users.

Classification

NEURAL NETWORK FROM SCRATCH

Python, NumPy, Machine Learning, Deep Learning

Developed a **fully functional neural network from scratch**, implementing key machine learning principles without relying on high-level frameworks like TensorFlow or PyTorch. Designed and trained the model using **Python** and **NumPy**, handling forward propagation, backpropagation, and optimization manually. atlas-machine_learning/supervised_learning/classification at main · hashthat/atlas-machine_learning

Basic_C_Shell

HTTPS://GITHUB.COM/BASHTHAT/BASIC_C_SHELL

C, Unix System Programming, Process Management

Developed a **custom shell in C**, implementing fundamental shell functionalities using **fork() and exec()** for process creation and execution. Designed to handle **basic Unix commands**, manage child processes, and execute system calls efficiently while utilizing **low-level system programming skills**.