Robert Pearce

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Education

UNIVERSITY OF NEVADA LAS VEGAS | Las Vegas, NV **June 2026**
Bachelor of Science Computer Science **GPA:** 3.7

COLLEGE OF SOUTHERN NEVADA **June 2022**
Associate of Business **GPA:** 3.8

Technical Skills

Languages: Proficient: C++ | Python | Assembly
Familiar: HTML | CSS | JavaScript | SQL | Rust

Operating Systems: Linux | Windows | MacOS

Tools: Visual Studio Code | Anaconda | PyCharm | RustRover

Relevant Coursework

Data Structures & Algorithms (C++): Introduces sequential and linked structures, file access methods, internal structures (stacks, queues, trees, graphs), algorithms for manipulation, and Big-O notation.
Discrete Mathematics: Topics include set operations, Cartesian products, relations and functions, equivalence relations, graphs and digraphs, propositional calculus, mathematical induction, and elementary combinatorics applied to probability.
Calculus II: Further applications and techniques of integration including integration by parts, sequences and series, polynomial approximations.

Project Experience

Projectile Motion Simulator *Python | NumPy | Matplotlib | Pytest* **June 2024**
- Developed a Python program to calculate and visualize projectile trajectories based on user-provided launch angle and velocity.
- Integrated NumPy for calculations, Matplotlib for trajectory plots, and Pytest for validation with OpenStax textbook examples.

8 Queen Chess Puzzle *C++ | Recursion | Backtracking Algorithm* **Apr 2023**
- Implements a recursive backtracking algorithm to place 7 additional queens on a chess board in a way where no 2 queens threaten each other. Code available upon request.

Integral Approximation Visualization *C++ | Calculus II* **Mar 2023**
- Program to demonstrate the differences between Riemann Sum integral approximation methods, left endpoint, midpoint, right endpoint, and trapezoidal approximation.

Relevant Work Experience

STEM Mentor **Las Vegas, NV**
University of Nevada Las Vegas *May 2024 – June 2024*
- Oversaw a group of 5 middle school students in completing programming projects using C++ and Arduino.
- Provided personalized guidance and support to facilitate the development of STEM identity among mentees.

Supplemental Instruction Math Leader **Las Vegas, NV**
College of Southern Nevada *Aug 2023 - Present*
- Plan and conduct 3-4 study sessions per week throughout the term, using strategies learned in SI Leader Training to prepare and provide aid to 80+ students a semester.
- Made supplementary videos covering notoriously difficult concepts such as difference quotient, asymptotes, and related rates.

CERTIFICATES

HARVARD CS50 PYTHON **June 2024**
edX HarvardX

IBM DATA STRUCTURES AND ALGORITHMS USING C++ **Dec 2023**
edX

CISCO NDG LINUX UNHATCHED **June 2023**
CISCO Networking Academy