JARED NELSON

Software Engineer

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SUMMARY

Inquisitive and passionate computer science major at the University of Nevada, Reno. Strong foundations in math and programming logic, seeking to obtain professional level experience through collaboration and communication with adept software engineers.

TECHNICAL SKILLS

Linux | MySQL | Webscraping | Machine Learning & AI | Algorithms | Object Oriented Programming | React | Data Structures | Git | Design Patterns

KEY ACHIEVEMENTS

1st Place at UNR Hackathon 2020

Achieving first place in Machine Learning and Artificial Intelligence category at the UNR Hackathon 2020

Dean's list

University of Nevada, Reno

JOB EXPERIENCE

Research Intern

University of Nevada, Reno Department of Cybersecurity

05/2021 - Ongoing | Reno, NV

Real-time network monitoring to detect congestion events. Use software-defined network routing adjustments to provide quality of service.

- Technologies used include Python socket, NTOPNG, and Rabbitmq messaging service

Sales Associate Flooring Department

Home Depot

05/2017 - 05/2021 | Reno, NV

Stock product and ensure customers find the products that they need. Use the store computer systems to special order product and monitor customer flooring installs and orders.

PROGRAMMING

- Python
- Javascript/React
- HTML & CSS
- SQL
- C++

EDUCATION

Bachelors of Computer Science and Engineering

University of Nevada - Reno

2017 - Ongoing | Reno, NV

Minor in Mathematics
Minor in Big Data

University of Nevada - Reno

2017 - Ongoing | Reno, NV

STRENGTHS

- Reliable and Consistent
- Always Learning
- Communication and Team Building

PROJECTS

University Athletics Scheduling Application

Working with athletics department at the University of Nevada, Reno to develop a scheduling and workout application for athletic groups.

- Users can create groups and publish workout plans and add event dates for the group.
- Group leaders can track athletic progress for each member and print statistics.
- The goal of this project is to give the athletic department a dependable mobile application instead of having only pen and paper.

Network Monitoring

Real-time network monitoring to detect congestion events and using software-defined networking to make real-time routing adjustments providing quality of service for network needs.

- Achieved using NTOPNG, Python socket, and RabbitMQ

Live Video Streaming Using SRGAN

Web application which uses live webcam feed, sending compressed video frames from one user and receiving these compressed frames by another user. The received frames are then enhanced by the SRGAN algorithm resulting in an upscaled image compared to the compressed image.

- The solution behind this project was creating a streaming application that sends compressed video frames to use less bandwidth, allowing people with not great network connections to be able to send and receive video stream.

Find Movie Streaming

Using python programming language to web scrape movie information from websites such as Netflix, Hulu, and Hbo. Using this information to create a Reactjs web application listing all available movies that can be streamed from various streaming services.

SQL API using C++ for Front and Back End

Using the C++ programming language to create a command line interface simulating SQL commands and logic. Re-creating portions of the SQL database API such as creating databases and tables, adding to the tables, locking different users from database, etc.