

Alexander Nelson

Orem UT

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SKILLS AND PROGRAMMING LANGUAGES

- Python, Java, C++, SQL, MySQL, JavaScript
- Experience with Data Structures and Algorithms
- Experienced with APIs
- Enthusiastic learner motivated by new technical skills, and an excellent self-starter

EDUCATION

Masters of Software Development

University of Utah, DECEMBER 2020, 4.0 GPA

Relevant Courses: Database Systems and Applications, Data Structures & Algorithms, Data Analytics & Visualization, Computer Arch & Operating Systems, Networks & Security, Software Engineering

Bachelor of Science in ACCOUNTING

Utah Valley University, DECEMBER 2015, Outstanding Merit Dean's Scholarship Recipient

RELEVANT ACADEMIC PROJECTS

Backend Database for Learning Management System

- Designed and built MySQL Database complete with controllers using LINQ for frontend (C#)

Capstone Project (August 2020 – Present)

- Engineering around Machine Learning Image Classification, Mentor: Dr. Varun Shankar

Spatial Partitioning Data Structures

- Built QuadTree, KDTree, and Bucketing structures for multi-dimensional data (Dlang)

Math Equation Interpreter

- Built math expression interpreter complete with documentation and testing package (C++)

Encrypted Filesystem

- Used FUSE library to implement an encrypted filesystem (Python)

PacMan Optimal Path Finder

- Implemented Breadth First Search successfully (Java)

Fully Functioning Chat Server

- Deployed in a container using Docker (JavaScript, HTML, CSS, Java)

PERSONAL PROJECTS

Automatic E-Mail Generator for Basketball Stats

- Build automatic basketball stat e-mail system using stats obtained through web scraping (Python)

SFML Snake

- Re-created classic Snake game (C++)

International Space Station API project

- Connected to ISS API to display when station is overhead and information of astronauts (Python)

EMPLOYMENT

Domo, American Fork, Utah

CORPORATE GENERAL LEDGER ACCOUNTANT, OCT 2018-DEC 2019

- Integrated NetSuite Database into Domo software (SQL)

Unicity International, Orem, Utah

INTERNATIONAL STAFF ACCOUNTANT, JAN 2016-OCT 2018

- Improved process speed and accuracy by self-teaching and using VBA, SQL, and Navision Dataports