

Daniel Serban

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PROFESSIONAL SKILLS PROFILE

- Algorithms and Data Structures
- Moderate Linux Server Security
- Network Architecture
- Innovative and Hardworking

EDUCATION

B.S. in Computer Science, Liberty University, Lynchburg, VA May 2020

- Cyber-Security cognate
- 3.93 GPA
- Honors Program graduate – honors thesis: <https://digitalcommons.liberty.edu/honors/972>

EXPERIENCE

Web Application Programmer May 2019 – August 2019

Mathematics Department, Liberty University

- Configured webserver backend and wrote code for a LaTeX-based math image generation browser extension
- Wrote background scripts and content scripts for the parsing of DOM pages and data retrieval
- Used security-minded programming practices and webserver configuration techniques

CS/C++ Tutor, School of Engineering, Liberty University February 2018 – Present

- Aided students in understanding various computer science concepts
- Helped students write successful and efficient programs using C++
- Successfully searched for and eliminated critical programming errors in students' programs

RELEVANT COURSEWORK

Stand-Alone Database Application with Graphical User Interface

- Used SQLite embedded database to store data and run SQL queries
- Created graphical user interface for application with Visual C#
- Interface allowed users to enter text, click buttons, and see output displayed in a grid format
- Wrote C# code to integrate actions and objects from the graphical interface with the SQLite API

Linux Apache Web Server

- Set up basic Apache web server on Raspberry Pi running a variation of Debian Linux
- Created HTML pages with forms for text entry, checkboxes, buttons, images, and audio
- Wrote PHP code to run Bash scripts and execute commands in the server's OS from the webpage
- Created a working version of the classic text adventure game Zork that runs in the web server's operating system, but gets input from and sends output to each individual user's webpage

Semester-Long Database Design and Creation Project

- Acted as team leader, delegating tasks fairly and urging everyone to keep progress continuing smoothly so as not to miss our deadlines
- Created entity relationship diagram of the database our client (professor) wanted according to her description of the data that needed to be handled
- Wrote SQL code to build client's database according to her description of how the data gets used
- Helped clean, fix, format, and enter over 64,500 records of client-supplied data into the database using Excel, Microsoft Access, and SQL Server

TECHNICAL SKILLS

Operating Systems

Linux
Windows

Applications and Tools

Visual Studio
Git
Make
Regular Expressions
VMWare
VirtualBox
Apache Web Server
SQL Server
SQLite
Docker
VyOS Router
PFSense Firewall
Excel

Languages (proficient)

C/C++
SQL
Bash script

Languages (moderate)

JavaScript
PHP
Java
C#
HTML

Languages (dabbled with)

Python
Ruby
LaTeX
XML
Lisp
Prolog
Fortran95
Ada

Mathematics

Calculus I & II
Probability & Statistics
Intro to Operations Research
Discrete Math