Kai Bell

kaibell241@gmail.com / (703) 554-2800 / 23747 Hopewell Manor Terrace, Ashburn, VA

Summary

Hardworking computer science new graduate seeking a growth-oriented opportunity to kickstart his career.

Skills

Communication skills, Conflict resolution, Java, C++, R (programming language), Python, Django, Data Analytics, HTML, Apache, CSS, Learning on the Fly, JavaScript

Education

Computer Science

University of Virginia • Charlottesville, VA
05/2024

Computer Science

James Madison University • Harrisonburg, Virginia
Enrolled from 08/2020-05/2021

Experience

Front Desk Receptionist

Physician's Premier Weight & Wellness Center • Ashburn, VA
06/2023 - 08/2023

- Customer Service Experience
- Problem Solving
- Learned how to use eClinical Works, an Electronic Medical Records (EMR) system, within a few hours of employment
- Often asked to improvise/go off script in order to solve issues
- Brought many new ideas into the practice and helped the workplace run smoother
- Sorted through database using SQL to find patients of a particular status

Related Coursework

CS 149: Programming Fundamentals (JMU)

- Foundation for Java

CS 159: Advanced Programming (JMU)

- More in-depth look at Java
- Specfically: application design, inheritance, recursion, exceptions, effective testing strategies (JUnit)
- Was asked to design applications (via UML diagrams) according to specifications, implement design, then write JUnit test to ensure it fulfilled the specifications effectively

CS 2110: Software Development Methods (UVA)

- Very similar to CS 159
- Main differences include: exploration of time-complexity, increased use of abstract and template classes

CS 2120: Discrete Math and Theory 1 (UVA)

- Set foundations of logic
- Specifically: proofs, set/set operations, logical properties, etc.
- Helpful in learning/evaluating algorithms

CS 2150: Program & Data Representation (UVA)

- Majority done in C++, with some x86 assembly language later in the course
- Explores high-level programming in conjunction with machine-level representation (numbers, operations, control structures, etc.)
- Practice with understanding and implementation of linked lists, stacks, queues, hash tables, trees (mainly AVL and BST), and graphs
- Developed understanding of evaluation of time and space complexity through use of Big-O, Big-Omega, and Big-Theta

STAT 1601: Intro Data Science with R (UVA)

- Introduction to scraping, manipulating, analyzing, and displaying data using the statistical software R
- Accomplished through use of traditional methods of the aforementioned functions, as well as through the use of the popular dplyr package

CS 3330: Computer Architecture (UVA)

- By taking this course, students will:
    - become conversant with fundamental computer architecture concepts,
    - be able to read and evaluate specs of modern architectures,
    - understand the implications of computer architecture on performance and security, and
    - gain experience designing a working processor from scratch.

CS 3240: Advanced Software Development (UVA)

- First major experience with Python
- Analyzes modern software engineering practice for multi-person projects
- Methods for requirements specification, design, implementation, verification, and maintenance of large software systems
- Advanced software development techniques and large project management approaches
- Project planning, scheduling, resource management, accounting, configuration control, and documentation
- Semester-long project involving web development with Python through Django using the "scrum" development philosophy
    - Also brief first experience with HTML, CSS, and database control through SQL

CS 3710: Introduction to Cybersecurity (UVA)

- Both non-technical issues, such as ethics and policy, and technical issues are covered. Students see and experiment with a wide range of areas within cybersecurity, including: binary exploitation, encryption, digital forensics, networks, and modern threats.

Below Courses are Currently In-Progress

CS 4260: Internet Scale Applications (UVA)

- A survey of methods for building large-scale internet websites and mobile apps, with a focus on how theory meets practice.
- Covers performance engineering, scaling, security, and large team software engineering.
- Greater emphasis on web development tools such as HTML, CSS, JavaScript, and Apache
    - Other tools to be used throughout semester

CS 3100: Data Structures and Algorithms 2 (UVA)

- Builds upon previous analysis of algorithms (from CS 2150) and the effects of data structures on them.
- Algorithms selected from areas such as searching, shortest paths, greedy algorithms, backtracking, divide-and-conquer, dynamic programming, and machine learning.
- Analysis techniques include asymptotic worst case, expected time, amortized analysis, and reductions.