Kai A. Bell

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EDUCATION

University of Virginia   **Charlottesville, Virginia**
B.A. in Computer Science   *Expected Graduation, May 2024*

- o **Related Coursework:** Software Development Methods, Discrete Math, Program & Data Representation, Intro to Data Science with R, Computer Architecture, Advanced Software Development, Intro to Cybersecurity, Internet Scale Application, Data Structures & Algorithms
- o **To be completed in Spring 2024:** Engineering Interactive Technologies, Artificial Intelligence

James Madison University   **Harrisonburg, Virginia**
Computer Science   *Aug 2020 - May 2021*

- o **Related Coursework:** Programming Fundamentals, Advanced Programming

COURSEWORK (cont.)

Data Structures & Algorithms
- Exploration for algorithms used for searching, shortest paths, greedy, divide-and-conquer, dynamic programming, and machine learning
- Compared and contrasted benefits and costs for using different types of data structures for algorithm implementation
- Projects including implementation for each of these algorithms through Python

Program & Data Representation
- Explored high-level programming in conjunction with machine-level representation
- Practice with understanding and implementation of various data structures (lists, stacks, queues, trees, graphs)
- Developed understanding and evaluation of time and space complexity

Advanced Software Development
- Analyzed modern software engineering practice for multi-person projects
- Explored industry methods for requirements specification, design, implementation, and maintenance of large software systems
- Semester-long web development project with Python through Django using the "scrum" development philosophy
  - o First-hand experiences with project planning, scheduling, resource management, and documentation

Internet Scale Applications
- Surveyed methods for building large-scale internet websites, with a focus on how theory meets practice
- Covered performance engineering, scaling, security, and large team software engineering
- Used tools such as HTML/CSS, JavaScript, Node.js, MongoDB, Docker, Apache, and Git for various small projects throughout the semester

Intro to Data Science with R
- Experience with data scraping, manipulation, analysis, and visualization with the statistical programming language R
- Project requiring the application of all of these techniques to find which ski hotel provides the best value in Europe based on a variety of metrics, specifics available in the Portfolio section of my website

EXPERIENCE

Physician's Premier Weight & Wellness Center   **Ashburn, Virginia**
Front Office Receptionist   *June 2023 - Aug 2023*

- Customer service experience
- Often asked to improvise in order to solve problems that others could not
- Brought in many new ideas to help the practice run smoother and more efficiently

SKILLS

Programming: Java, Python, JavaScript, HTML/CSS, Node.js, C++
Tools: Visual Studio Code, Eclipse, AWS, Git, Bootstrap, Agile, Docker, Adobe Photoshop, MongoDB, Django, Semantic UI
Soft Skills: Effective Communication, Team Collaboration, Critical Thinking and Problem-Solving, Writing, Conflict Resolution, Performance Analysis and Enhancement