Giles Gordon

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Availability: May – December 2024

Education

Northeastern University | Boston, MA — Sept. 2022 - Present
Khoury College of Computer Sciences — Expected May 2026
Candidate for Bachelor of Science in Computer Science | **GPA:** 3.66/4.00

Relevant Coursework: Web Development | Mobile Application Development | Object-Oriented Design | Computer Systems | Mathematics of Data Models | Algorithms and Data | Foundations of Cybersecurity | Fundamentals of Computer Science I and II | Business/Professional Speaking | Discrete Structures

Deerfield Academy | Deerfield, MA — Sept. 2018 – May 2022

Coursework: Advanced Placement (AP) Computer Science | Data Structures and Algorithms | AP Statistics | AP Physics C (Mech/E&M) | Linear Algebra | AP BC/Multivariable Calculus

Honors: Northeastern: Dean's Scholarship, Dean's List, Deerfield: AP Scholar with Distinction Award

Technical Skills

Languages: Java | Python | JavaScript | C | Objective-C | HTML | CSS | Kotlin | Assembly (Intel x86/RISC-V) | Racket

Other: React | Node.js | Git | Linux | Windows PowerShell | Netlify | Bootstrap | VSCode | IntelliJ | PyCharm | Android Studio | Room DB | Redux | RESTful APIs | SQL

In Progress: NoSQL/MongoDB | Agile/Kanban | Firebase

Projects

Kanbas | *Web Dev full stack* — In Progress

- Currently developing a mock Canvas web application with responsive client-side interactivity and dynamic content using HTML, CSS, and JavaScript and through leveraging the React framework for modular and reusable code.
- Designing and implementing RESTful APIs to communicate between the front-end and back-end using technologies such as Node.js and MongoDB.
- Employing security best practices, including data encryption, input validation, and authentication mechanisms.

Reversi Game | *Java, OOD, Git* — Oct. - Dec. 2023

- Co-developed the game Reversi in 3.5k loc featuring human or customizable AI gameplay, a fully functional GUI made with Java Swing, and hexagonal and square board options.
- Maintained design quality by partitioning the code into the model view and controller to ensure modularity.
- Implemented the Strategies, Adapter, Decorator, and Observer patterns, favoring composition over inheritance.

Klondike Game | *Java, OOD, Git* — Sept. – Oct. 2023

- Created multiple playable console-based versions of the game Klondike in Java using object-oriented design principles such as the MVC design pattern, abstraction, and encapsulation.
- Wrote exhaustive test cases for all aspects of the models, the view, and the controller, ensuring proper functionality.

Maze Generator and Solver | *Java, Algorithms* — May 2023

- Collaborated to create a program using Kruskal's Algorithm to create randomized mazes with a single viable path.
- Implemented both breadth-first and depth-first search algorithms for solving mazes efficiently.

Map Routing Algorithm | *Objective-C, Algorithms* — May 2021

- Implemented Dijkstra's algorithm for assessing the shortest path between U.S. cities represented by coordinate pairs.
- Modeled the map as a weighted graph, utilizing a min-heap data structure to store city distances.
- Optimized runtime by employing dynamic programming techniques.

Work Experience

Home Improvement Worker | Perry, ME — June - Aug. 2021-2023

- Executed a variety of home improvement tasks, including repairs, installations, and landscaping projects.
- Developed a positive working relationship with the client through clear and responsive communication.

House Painter | Pembroke, ME — June - Aug. 2020

- Managed all aspects of a full-time house painting project, including surface preparation and primer and coat application, ensuring timely completion within deadlines.
- Achieved high client satisfaction through meticulous attention to detail and superior workmanship.