

Liam Dyer

Email: ldyer2@alaska.edu Phone: (907) 957-2706 GitHub: github.com/liam2258

Professional Summary

Senior Computer Science student at the University of Alaska Anchorage with 2 years of program experience through coursework and personal projects. Knowledgeable in C++, SQL, IT, HTML, CSS and am quick to learn new technologies. Interested in gaining additional hands-on experience in software development and computer sciences.

Education

Bachelors of Computer Science

May/2023

University of Alaska Anchorage/ Anchorage, AK

- 3.07 GPA
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Work Experience

IT Student Assistant

University of Alaska Southeast

May/2019 - Present

- Provided technical support both in-person and through the call center
 - Worked as part of a team to assist students and faculty with technical needs
 - Documented ongoing issues and kept logs of managed equipment
 - Wrote IT articles for university student newspaper
 - Other responsibilities included setting up equipment, manning cameras, updating/organizing records, and updating the IT website
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Programming Projects

Dijkstra' Shortest Path (github.com/liam2258/Dijkstra)

A C++ program to find the shortest path between nodes. This program takes a txt file input of nodes and converts them into an adjacency matrix. The user can select a source and destination node and the program will respond with the shortest path and distance taken using Dijkstra's algorithm.

- *Tools used (C++, Visual Studio 2022)*
- *Completed for class Data Structures and Algorithms (Grade - 100%)*

Traveling Salesman (github.com/liam2258/Traveling-Salesman-Evolutionary-Algorithms)

A program to solve the traveling salesman problem using evolutionary algorithms. The program constructs a city grid, randomly generated travel fare (between \$99 and \$2000), and a starting population of routes. Using the parameters listed in the tableau it runs 12 total times evolving 12 different populations to find the cheapest travel route. 3 runs for each of the 4 mutations tested, insert, scramble, swap, and inversion.

- *Tools used (C++, Visual Studio 2022)*
- *Completed for class Evolutionary Computing (Grade - 100%)*

Employee Attrition (github.com/liam2258/EmployeeAttrition)

Using JupyterLabs and a data sample of 1470 employees, this program analyzes and formats data to be used in machine learning. Data is then fed into a decision tree and trimmed, creating a final result that can predict if an employee will leave their job with 85% accuracy.

- *Tools used (Python, JupyterLabs, Anaconda, pandas library)*

Profile Website (github.com/liam2258/ProfileWebsite | liam2258.github.io/ProfileWebsite)

A static profile website written in HTML, CSS, and Javascript, hosted using Github Pages.

- *Tools used (HTML, CSS, JavaScript, Visual Studio Code, Github Pages)*
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Relevant Courses

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|---------------------------------------|-----------|
| • Evolutionary Computing | (Grade A) |
| • Database Systems | (Grade A) |
| • Computer Programming I | (Grade A) |
| • Computer Programming II | (Grade B) |
| • Intro to Computer Science | (Grade B) |
| • Data Structures & Algorithms | (Grade B) |
| • Computer Hardware Concepts | (Grade B) |
| • Professional Writing | (Grade B) |
| • Applied Statistics for the Sciences | (Grade B) |
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Skills

- Advanced proficiency in C++
- Proficient in SQL and MySQL
- Basic proficiency in HTML, CSS, JavaScript, and Python
- Excellent verbal and written communication
- Ability to work in a team or independently
- Exceptional technical documentation skills
- Experienced with Google Workspace