

Dylan McGoldrick

<https://dylmcgold.com>
github.com/dylmcgold

LinkedIn: Dylan McGoldrick
dylanmcgoldrick@gmail.com

Education

Loyola Marymount University - LMU

August 2019 – May 2023

Undergraduate Student in Computer Science, 3.0 Cumulative GPA

Los Angeles, California

- Languages and Automata 1 (Languages) - Covered syntax and semantics of Java, Python, JavaScript, TypeScript, Swift, and C++.
- Languages and Automata 2 (Compilers) - Learned and wrote components of syntax-trees, grammars, and compilers.
- Algorithms - Executed algorithms such as A* for maze pathfinding, minimax with alpha-beta pruning, and breadth/depth first searches.
- Artificial Intelligence (AI) - Learned about logical inference, machine learning, deep learning, search trees, and neural networks.
- Data Structures - Implemented different ADTs such as linked lists, stacks, queues, heaps, hash tables, sets, trees, and graphs.
- Computer Systems Organization - Worked with machine instructions, assemblers and assembly languages and registers.
- Web App Development - Fetched APIs and built Web Apps with Firebase/Firestore deployed onto GitHub Pages.

Programming Languages: Python, Java, C, C++, JavaScript, HTML, CSS, Swift, SQL, Assembly

Frameworks/Technologies: Git, PostgreSQL, MongoDB, Neo4j, Firebase, REST APIs, LaTeX, React, Node.js, Pytorch

Projects

Our Common Music - ReactJS, Firebase, Spotify API

August 2022 - August 2023

<https://ourcommonmusic.com>

- A React App using the Spotify API to retrieve users top 50 tracks and artists.
- Led developments in a group of 4 and pulled data from over 1000+ data points.
- Presented Web App to 30+ students, professionals, and department heads.

VikingScript - JavaScript, HTML, CSS

January - May 2022

<https://github.com/Willr2001/VikingScript>

- Deployed a user-friendly website to GitHub pages which shows off 7+ syntactic features.
- Created programming language and grammar with 30+ rules translatable to JavaScript.
- Programmed the 5 components to a basic compiler.

Neo4j Amazon Product Database - Cypher

August - December 2022

- Loaded a Neo4j database using a 980MB Amazon data set with 1,000,000+ unique values.
- Created 200,000+ relationships between product and category nodes.
- Performed 5 specific queries such as finding the highest number of reviews, highest prices, product IDs, etc.

Movie List Now - JavaScript, HTML, CSS

August - December 2021

<https://github.com/Willr2001/MovieListNow>

- Collaborated with a team of 4 to develop React App deployed with firebase hosting.
- Fetched from 250,000+ movie titles, release dates, and posters from a Movie API.
- Enabled Google authentication and stored 50+ past searches into a firestore database.

Languages and Automata 1 - Java, Python, JavaScript, Swift

August - December 2021

<https://github.com/dylmcgold/LanguagesAndAutomata>

- Wrote various programs in 4 programming languages including Java, Python, JavaScript, and Swift.
- Engaged with generators, pointers, and streams that thousands of programmers implement everyday.
- Solved problems concerned with scope, destructuring, and currying that thousands of computers rely on.

IEEE LED / Arduino (Institute of Electrical and Electronics Engineers) - C++

November 2019 - March 2020

- Revisited project Christmas of 2022 using 300 individually addressable LEDs.
- Wrapped around a Christmas tree running 5+ custom programs including a snake game and a fire.
- Cooperated with a team of 6+ in the IEEE club on a LED light strip project.
- Toured SpaceX facility with IEEE club members and interacted with 3 SpaceX engineers.

Activities

Chess Club, Intramural Sports League, IEEE(Institute of Electrical and Electronics Engineers)