Eric Feng

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EDUCATION

University of Maryland, College Park | Bachelor of Science in Computer Science | GPA 3.3 — Expected May 2024
Montgomery Blair High School | High School Diploma, Magnet Diploma — May 2020
Relevant Coursework

- Object-Oriented Programming, Algorithms, Web Application Development with JavaScript, Introduction to Computer Systems, Discrete Structures, Organization of Programming Languages, Data Structures, Introduction to Data Science

PERSONAL PROJECTS

Personal Portfolio, HTML + JavaScript + CSS — 2023

- Developed a responsive personal website utilizing **HTML**, **JavaScript**, and **CSS** to showcase my software engineering projects, technical skills, and professional experience.

The Effect of Per Game Stats on the Modern Era NBA Teams Win Percentage, Python — 2023

- Created a tutorial that walked users through the entire **data science pipeline**: data curation, parsing, and management; exploratory data analysis; hypothesis testing
- Pulled NBA data from an online **database**, used tools such as **NumPy**, **pandas**, and **beautifulsoup** to organize, analyze, and draw hypotheses with the data

Unix Simulator, C — 2022

- Simulated Unix system in **C** where there existed a root directory, additional directories and files which users could add/modify, and functions such as getting the path from the current directory to root
- Written using **dynamically allocated data structures**, implemented concepts such as **memory allocation** and **memory deallocation**, and searching algorithms such as **DFS** and **BFS**

Six Degrees of Kevin Bacon, Java — 2022

- Simulated a web of profiles on social media using **graphs** in **Java**
- Performed operations such as finding the least amount of connections between two profiles (implemented using **DFS**) and finding all first connections (implemented **BFS**)

MicroOcaml Interpreter, OCaml — 2022

- Constructed a version of **utop** (a top-level for OCaml that runs in the terminal)
- Used **lexer** and **parser** to process and execute commands along with implementing an interpreter

Testudo Tips, React + Firebase — 2022

- Constructed an online forum where users were able to share and interact with each other's posts
- Interactions included commenting and upvoting other user's posts

Battleship, Ruby — 2022

- Recreated the board game Battleship played on a dynamically sized gameboard using **Ruby**
- Implemented functions using **RegEx** and **file processing** such as figuring out if the coordinates of a ship were valid, and attacking the opponents' ships
- Implemented a to_string function which creates a graphical representation of the board

PROFESSIONAL EXPERIENCE

Mobile Development Intern — 2017
National Institute of Health | Bethesda, MD

- Developed a 2D educational game for iOS devices that taught users about environmental health and toxicology using **Swift**
- Worked with a 3 person team to implement physics (how sprites would collide and interact) and graphics of the game

Counselor in Training — 2018
Stonebridge Sharks Swim Team | North Potomac, MD

- Organized events such as spirit days and swim meets with other CITs, created goal cards and lineups for swimmers, and developed communication skills which helped in a team-based environment
- Mentored younger swimmers to better their technique through stroke correction and guidance, motivated and encouraged them to perform confidently in a competitive environment

Counselor in Training — 2016
Bullis Summer Programs | Potomac, MD

- Developed communication and mentor skills through teaching entrepreneurship and astronomy class alongside certified instructors
- Ensured campers understood the material being taught in classes while maintaining a positive and encouraging learning environment

SKILLS

Languages: Java, Python, C, JavaScript (&TypeScript), Ruby, Ocaml, Rust, MATLAB, HTML, CSS, Swift
CS Related: Algorithm Analysis, Unix, OOP, Functional Programming, Low-Level Programming, Assembly
Personal: Fast learner, Analytical/problem-solving skills, Teamwork, Critical thinking, Communication, Public speaking
Languages: English, Mandarin Chinese, Spanish